



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

0000014

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-0610

April 25, 1994

Fansteel, Inc.
One Tantalum Place
North Chicago, Illinois 60064

Re: Fansteel, Inc.
Fansteel, Inc.
NPDES Permit No. ILG250013
Notice of Coverage under the Non-Contact Cooling Water General Permit

Gentlemen:

The Illinois Environmental Protection Agency has reviewed your application and determined that the discharges described therein are appropriately covered by a General NPDES Permit issued by the Agency. A copy of the General Permit is enclosed.

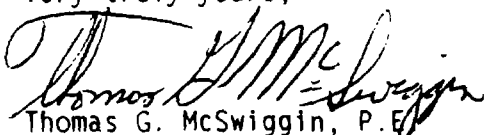
The receiving waters are to be designated as General Use Waters for purposes of this permit. Because your facility has been identified as one of those not regulated in 40 CFR 122.26(b)(14)(i-xi), the requirements to submit stormwater application form 2F in Special Condition 10 and to prepare a Storm Water Pollution Prevention Plan in Special Condition 13 are waived.

The Permit includes discharge limitations and monitoring and reporting requirements. Failure to meet any portion of the permit could result in civil and/or criminal penalties. The Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit is applied to your discharge effective on the date of this letter. You have the right to appeal the Agency's decision to cover your discharge by the General Permit to the Illinois Pollution Control Board within a 30 day period following the date of this letter.

Should you have any questions concerning the Permit, please contact Richard E. Pinneo at the telephone number indicated above.

Very truly yours,


Thomas G. McSwiggin, P.E.

Manager, Permit Section
Division of Water Pollution Control

TGM:SFN:REP:rlc/0353w,42

Enclosure: General Permit
cc: Records
CAS
Maywood Region

FANSTEEL

EPA Region 5 Records Ctr.



229820

General NPDES Permit No. ILG250013

Illinois Environmental Protection Agency
Division of Water Pollution Control
3200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) Permit

Expiration Date: July 1, 1998


Issue Date: February 15, 1994
Effective Date: February 15, 1994

Discharge authorized by this General Permit: In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board (35 Ill. Adm. Code, Subtitle C, Chapter 1), and the Clean Water Act, the following discharges may be authorized by this permit, in accordance with the conditions and attachments herein:

Discharges of noncontact cooling water, noncontact cooling water mixed with stormwater, or noncontact cooling water and separate discharges of stormwater.

Receiving Waters: Discharges may be authorized to any surface water of the State, or to any storm sewer tributary to such surface water.

To receive authorization to discharge under this general permit, a facility operator must submit the proper application forms to the Illinois Environmental Protection Agency. Authorization, if granted, will be by letter and include a copy of this permit.


Thomas G. McSwiggan, P.E.
Manager, Permit Section
Division of Water Pollution Control

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVG.	DAILY MAX.		
Flow (MGD)			Monthly	Single Reading
Temperature	See Special Conditions 2, 3, and 4		Monthly	Single Reading
Total Residual Chlorine	See Special Condition 6		Weekly*	Grab*

*See Special Condition 5

Special Conditions

SPECIAL CONDITION 1. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge(s), but prior to entry into the receiving stream, or into a storm sewer tributary to the receiving stream. Sampling must occur during normal plant operations.

SPECIAL CONDITION 2. Discharge of noncontact cooling water from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by 35 Ill. Adm. Code 302.102, as amended:

- A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

1. For discharges to the Mississippi River between the Wisconsin border and the Rock River:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	45	45	57	68	78	85	86	86	85	75	65	52
°C	7	7	14	20	26	29	30	30	29	24	18	11

2. For discharges to the Mississippi River between the Rock River and the Iowa/Missouri border:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	45	45	57	68	78	85	86	86	85	75	65	52
°C	7	7	14	20	26	29	30	30	29	24	18	11

3. For discharges to the Mississippi River between the Iowa/Missouri border and the Alton Lock and Dam:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	45	45	57	68	78	86	88	88	86	75	65	52
°C	7	7	14	20	26	30	31	31	29	24	18	11

4. For discharges to the Mississippi River between the Alton Lock and Dam and the Ohio River:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	50	50	60	70	80	87	89	89	87	78	70	57
°C	10	10	16	21	27	31	32	32	31	26	21	14

5. For discharges to the Wabash River:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	50	50	60	70	80	90	90	90	90	78	70	57
°C	10	10	16	21	27	32	32	32	32	26	21	14

6. For discharges to the Ohio River:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	50	50	60	70	80	87	89	89	87	78	70	57
°C	10	10	16	21	27	31	32	32	31	26	21	14

Special Conditions

7. For discharges to all other waters except Lake Michigan and secondary contact waters:

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	50	50	50	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

SPECIAL CONDITION 3. For discharges to Lake Michigan, the following conditions shall be met outside a mixing zone which shall be no greater than a circle with a radius of 1000 feet or an equal fixed area of simple form:

- A. There shall be no abnormal temperature changes that may affect aquatic life.
 - B. The normal daily and seasonal temperature fluctuations that existed before the addition of heat shall be maintained.
 - C. The maximum temperature rise at any time above natural temperatures shall not exceed 1.7°C (3°F). In addition, the water temperature shall not exceed the maximum limits indicated in the following table:
- | | <u>Jan.</u> | <u>Feb.</u> | <u>Mar.</u> | <u>Apr.</u> | <u>May</u> | <u>June</u> | <u>July</u> | <u>Aug.</u> | <u>Sept.</u> | <u>Oct.</u> | <u>Nov.</u> | <u>Dec.</u> |
|----|-------------|-------------|-------------|-------------|------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|
| °F | 45 | 45 | 45 | 55 | 60 | 70 | 80 | 80 | 80 | 65 | 60 | 50 |
| °C | 7 | 7 | 7 | 13 | 16 | 21 | 27 | 27 | 27 | 18 | 16 | 10 |
- D. Neither the bottom, the shore, the hypolimnion, nor the thermocline shall be affected by any heated effluent.
 - E. No heated effluent shall affect spawning grounds or fish migration routes.
 - F. Discharge structures shall be so designed as to maximize short-term mixing and thus to reduce the area significantly raised in temperature.
 - G. No discharge shall exceed ambient temperatures by more than 11°C (20°F).
 - H. Heated effluents from more than one source shall not interact.
 - I. All reasonable steps shall be taken to reduce the number of organisms drawn into or against the intakes.
 - J. Cleaning of condensers shall be accomplished by mechanical devices. If chemicals must be used to supplement mechanical devices, the concentration at the point of discharge shall not exceed the 96-hour LC_{50} for fresh water organisms.

SPECIAL CONDITION 4. For discharges to secondary contact waters, stream temperatures shall not exceed 93°F (34°C) more than 5 percent of the time, or 100°F (37.8°C) at the edge of the mixing zone defined by 35 Ill. Adm. Code 302.102.

Secondary contact waters consist of the Chicago Sanitary and Ship Canal, the Calumet-Sag Channel, the Little Calumet River from its junction with the Grand Calumet River to the Calumet-Sag Channel, the Grand Calumet River, the Calumet River except the 6.8 mile segment extending from the O'Brien Locks and Dam to Lake Michigan, Lake Calumet, the South Branch of the Chicago River, the North Branch of the Chicago River from its confluence with the North Shore Channel to its confluence with the South Branch, the Des Plaines River from its confluence with the Chicago Sanitary and Ship Canal to the Interstate 55 bridge, and the North Shore Channel excluding the segment extending from the North Side Sewage Treatment Works to Lake Michigan.

SPECIAL CONDITION 5. Monitoring for total residual chlorine is required only under the following conditions:

- A. The discharge of noncontact cooling water consists of chlorinated potable water, and dechlorination is required to meet the total residual chlorine limit specified under Special Condition 6; or
- B. Chlorine is used as a chemical additive to the cooling water system for antifouling purposes.

Special Conditions

All samples for total residual chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained.

SPECIAL CONDITION 6. Discharge of noncontact cooling water from the facility must not exceed 0.05 mg/l total residual chlorine as a daily maximum concentration limit. The permittee shall achieve compliance with the 0.05 mg/l total residual chlorine limit as soon as possible, but no later than two years following notification of coverage under this general permit. The permittee shall construct dechlorination equipment, or undertake alternative means of compliance, in accordance with the following compliance schedule. Alternative means of compliance may include, among other things, providing documentation to the Agency that the 0.05 mg/l total residual chlorine limit is being achieved without dechlorination.

Compliance Schedule

<u>Item</u>	<u>Compliance Date</u>
1. Complete plans and specifications, if appropriate	6 months from notification of coverage under this general permit
2. Obtain a permit for construction, if appropriate	12 months from notification of coverage under this general permit
3. Submit an interim status report	15 months from notification of coverage under this general permit
4. Complete construction, if appropriate	22 months from notification of coverage under this general permit
5. Achieve compliance on or before	24 months from notification of coverage under this general permit

The interim status report required under Item 3 of the Compliance Schedule shall be submitted to the Agency at the address listed under Special Condition 14.

SPECIAL CONDITION 7. Discharges authorized under this general permit are limited to noncontact cooling water, or noncontact cooling water and stormwater, free from process or other wastewater discharges, and free from chemical additives other than chlorine. In the event that the permittee shall require the use of water treatment chemicals, other than chlorine, the permittee shall notify the Agency in writing in accordance with the Standard Conditions, Attachment H. The Agency may require the permittee to apply for and obtain an individual NPDES permit, pursuant to Special Condition 9 of this general permit.

SPECIAL CONDITION 8. Discharges of condenser cooling water from steam electric generating stations, or facilities regulated by 35 Ill. Adm. Code 304.222 for intermittent discharges of total residual chlorine resulting from usage for antifouling purposes related to the operation of condensers and cooling systems, are not authorized by this general permit. Intermittent usage is restricted to a maximum of two hours per day per condenser or cooling system unit.

SPECIAL CONDITION 9. Requiring an individual permit or an alternative general permit.

a. The Agency may require any person authorized by this permit to apply for and obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. The Agency may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. The Agency may grant additional time to submit the application upon request of the applicant. If an owner or operator fails to submit in a timely manner an individual NPDES permit application required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified for application submittal.

Special Conditions

b. Any owner or operator authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request, in accordance with the requirements of 40 CFR 122.21, to the Agency. The request shall be granted by issuing of an individual permit or an alternative general permit if the reasons cited by the owner or operator are adequate to support the request.

c. When an individual NPDES permit is issued to an owner or operator otherwise subject to this permit, or the owner or operator is approved for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the issue date of the individual permit or the date of approval for coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise subject to this permit, or the owner or operator is denied coverage under an alternative NPDES general permit the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Agency.

SPECIAL CONDITION 10. To receive authorization to discharge under this general permit, applicants must complete and submit Application Forms 1 and 2E for new or existing discharges of noncontact cooling water, or Application Forms 1, 2E and 2F for new or existing discharges of noncontact cooling water and stormwater.

SPECIAL CONDITION 11. Notice of coverage under this general permit does not relieve the permittee of the responsibility for any notifications or approvals which may be required by local authorities.

SPECIAL CONDITION 12. Discharges to sanitary or combined sewers are prohibited unless the appropriate State and local construction permits or authorizations are obtained.

SPECIAL CONDITION 13.STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The following is applicable only to discharges of stormwater, or stormwater mixed with noncontact cooling water.

- A. A storm water pollution prevention plan shall be developed by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
- B. The plan shall be completed within 180 days of notification of coverage under this general permit. Plans shall provide for compliance with the terms of the plan within 365 days of notification of coverage under this general permit. The owner or operator of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.
- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph G of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

Special Conditions

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.
2. A site map showing:
 - i. The storm water conveyance and discharge structures;
 - ii. An outline of the storm water drainage areas for each storm water discharge point;
 - iii. Paved areas and buildings;
 - iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates;
 - v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
 - vi. Surface water locations and/or municipal storm drain locations;
 - vii. Areas of existing and potential soil erosion;
 - viii. Vehicle service areas;
 - ix. Material loading, unloading, and access areas.
3. A narrative description of the following:
 - i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
 - ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials;
4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
6. A summary of existing sampling data describing pollutants in storm water discharges.
7. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
 1. Storm water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.

Special Conditions

4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
5. Storm water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
 - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
 - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
 - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
 - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination;
 - vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.
7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.
- H. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
- I. The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim portions of the plan as confidential business information, including any portion describing facility security measures.
- J. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.
- K. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance.

NPDES Permit No. ILG250013

Special Conditions

REPORTING

- L. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.

- M. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
Annual Inspection Report
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

- N. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

SPECIAL CONDITION 14. The permittee shall record monitoring results on Discharge Monitoring Report forms using one such form for each discharge each month. The completed Discharge Monitoring Report form shall be submitted monthly to IEPA, no later than the 15th of the following month, unless otherwise specified by the Agency, to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

Flow shall be reported on the Discharge Monitoring Reports as a monthly average value.

SPECIAL CONDITION 15. Noncontact cooling water means water used to reduce temperature which does not come into direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

TGM:SB:dlsr/3117r/sa

ATTACHMENT H

Standard Conditions

Definitions

Act means the federal Environmental Protection Act, Ch. 111, 1-2 B Rev. Stat. Sec. 1001-1051 as amended.

Agency means the Illinois Environmental Protection Agency.

Boards means the Illinois Pollution Control Board.

Clean Water Act (hereinafter referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES National Pollution Discharge Elimination System means the national program for issuing, modifying, renewing and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling for pollutants with limitations expressed in units of mass. The "daily discharge" is calculated as the total mass of the pollutant discharged over the day for pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedule of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or storage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and rescission, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a renewal application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Halt to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and

- (6) **Permit actions.** The permit may be modified, revoked and rescinded, or terminated or cause by the Agency pursuant to 40 CFR 122.82. The filing of a request by the permittee for a permit modification, revocation and rescission, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** The permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and rescinding, or terminating the permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by the permit.
- (9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by law, to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
 - (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit, and
 - (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.
- (10) **Monitoring and records.**
 - (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
 - (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original time chart recordings for continuous monitoring measurement, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.
 - (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements.
 - (2) The individual(s) who performed the sampling or measurements.
 - (3) The date(s) analyses were performed.
 - (4) The individual(s) who performed the analyses.
 - (5) The analytical techniques or methods used, and
 - (6) The results of such analyses.
 - (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals ensure accuracy of measurements.
- (11) **Signature requirements.** All applications, reports or information submitted to Agency shall be signed and carried:
 - (a) **Application.** All permit applications shall be signed as follows:
 - (1) For a corporation, by a principal executive officer of at least equal to vice president or a partner or person having equivalent responsibility for environmental matters for the corporation.
 - (2) For a partnership or sole proprietorship, by a general partner, proprietor, respectively, or
 - (3) For a municipality, State, Federal, or other public agency, either a principal executive officer or ranking elected official.
 - (b) **Reports.** All reports required by permits or other information requested by the Agency shall be signed by a person described in paragraph (a) or duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described in paragraph (a) and
 - (2) The authorization specifies either an individual or a person responsible for the overall operation of the facility, from whom the permittee may obtain a copy of a new permit.

NPDES PERMIT SPEED OF PROCESSING

fe

Name (File Subject) Transsteel Inc
 Location (County) Lake Region 2
 NPDES Number IL00 02411 Reviewer REP

IL6250013

UNIT

☒ Industrial ☐ Major
☐ Municipal ☒ Minor
☐ Watershed
☐ Mine

Current Permit Expiration Date:

05/01/94

TYPE OF APPLICATION

☐ New
☒ Renewal
☐ Modification
☐ Termination

✓ Date Received _____

Records Unit Log In _____

Sent to Word Processing _____

Approved by Reviewer for 15 Day Notice _____

Approved by Unit Manager _____

To P.N. Clerk for 15 Day Notice _____

Re-15 Day Notice _____

Returned to Reviewer _____

Approved by Reviewer for Public Notice _____

Approved by Unit Manager _____

✓ To P.N. Clerk for 30 Day Notice _____

Re-Public Notice _____

Returned to Reviewer _____

Approved by Reviewer for Issuance REP

Approved by Unit Manager SFN

Approved by Section Manager BA

Date Issued NA

12-02-93

12-03-93

4-8-94

4-11-94

4-22-94

4-25-94

ACTION

☐ Permit ☐ No Permit Required
☐ Modification ☐ Refusal of Modification
☐ Termination ☐ Denial

COPIES NEEDED

15-Day Review

30-Day Public Notice

Final

 PN/FS
 Draft Permit
 Application
 MOD/TERM Letter
 Engineer's Notes
 Other _____

 2 PN/FS
 Draft Permit
 Additional Engineer's Notes
 Transmittal Letter
 Other _____

 3 Permit
 2 Additional Engineer's Notes
 Transmittal Letter
 1 Other App

* * *

Engineer requests the following receive copies of the PN/FS Permit:

 Consultant
 Facility
 DLC
 Other _____

 Facility
 NIPC
 SIMAPC
 GERPDC
 ORSANCO
 Indiana
 Iowa
 Missouri
 Kentucky
 MPC
 DLC
 Other _____

 Consultant
 Facility
 NIPC
 SIMAPC
 GERPDC
 ORSANCO (if sent at 30-Day, must send at final stage)
 Indiana
 Iowa
 Missouri
 Kentucky
 MPC
 IDOT
 Mines & Minerals
 DLC
 Other _____

COMMENTS: _____

* * *

Engineer requests the following be mailed to Permittee with the Final Permit:

 X DMR and DMR Instructions (UNLESS FINAL IS A MODIFICATION)
 Fiscal Report Form for NPDES Permittee
 Effluent Biomonitoring & Toxicity Assessment
 Storet Numbers for Toxic Pollutants
 Instructions for PWS Plants
 Alternate Storm Limitations for Coal Mines
 Combined Sewer Operational Plan
 Metals, Cyanide, Total Phenols Influent Effluent Final Sludge
 Organic Priority Pollutants Influent Effluent Final Sludge
 Sludge Report

Industrial NPDES Permit Review Notes

I. Permittee Fansteel Inc. Permit No. IL 6250013
 Facility Name Fansteel Inc.
 City North Chicago County Lake
 Facility Contact Dore Kacmarik Phone No. 708 689 4900
 Major 3545-1 Minor 3365-1 ☒ New ☐ Reissued ☒ Modified ☐
 SIC Code 3369-1 3412-1 SIC Category Central Administrative Office

Brief description of manufacturing operations and discharge sources:
 The facility is presently the Corporate administration office and vacant buildings. The manufacturing operation was sold in January, 1990 to NRC Corporation. NRC Corporation continued to operate the manufacturing operations at this location until December, 1990 when manufacturing was shut down and equipment moved to NRC Corporation in Newton, MA or auctioned off in May, 1991.

Since June, 1991, the facility has been the Corporate administration office. The facility has been up for sale since October, 1991.

II. Name of Receiving Stream Pettibone Creek
 Use Classification: General Use ☒ Other (specify) _____
 7Q10 0 cfs Source of data ISWS
 Notifications Needed: Bordering State _____ ORSANCO _____
 NIPC ☒ SIMAPC _____ GERPDC _____

III. Federal Categorical Stds. Apply: Yes _____ No ☒
 40 CFR _____ Category _____
 Subcategories _____

IV. Storm Water Classification: Not Covered ☒ Category i-x _____ Category xi _____
 Application received: Yes _____ No ☒
 If category xi, is there exposure: Yes _____ No _____ No information ☒

IEPA Permit Reviewer Richard E. Pinneo Date 3-11-94

X. Treatment Types
(check all that apply)

Physical/Chemical Treatment

- ☐ 1A Ammonia Stripping
- ☐ 2A Carbon Adsorption
- ☐ 2N Chemical Hydrolysis
- ☐ 2B Chemical Oxidation
- ☐ 2C Chemical Precipitation
- ☐ 2D Coagulation
- ☐ 2E Dechlorination
- ☐ 2F Disinfection (Chlorine)
- ☐ 2G Disinfection (Ozone)
- ☐ 4I Disinfection (Ultraviolet)
- ☐ 2H Disinfection (Other)
- ☐ 1D Distillation
- ☐ 2I Electrochemical Trtmt.
- ☐ 1E Electrodialysis
- ☐ 1F Evaporation
- ☐ 1G Flocculation
- ☐ 1I Foam Fractionation
- ☐ 1J Freezing
- ☐ 1K Gas Phase Separation
- ☐ 2J Ion Exchange
- ☐ 1O Mixing
- ☐ 2K Neutralization
- ☐ 2L Reduction
- ☐ 1W Solvent Extraction
- ☐ 1X Sorption

Biological Treatment

- ☐ 3A Activated Sludge
- ☐ 3B Aerated Lagoons
- ☐ 3C Anaerobic Treatment
- ☐ 3K Biological Hydrolysis
- ☐ 8F Contact Stabilization
- ☐ 8G Extended Aeration
- ☐ 8D Lagoon(s)
- ☐ 3P 1 Cell Lagoon
- ☐ 3Q 2 Cell Lagoon
- ☐ 3R 3 Cell Lagoon
- ☐ 3S 4 Cell Lagoon
- ☐ 3D Nitrification-Denit.
- ☐ 8E Oxidation Pond or Ditch
- ☐ 3J Polishing Lagoons
- ☐ 6I Rock Filter
- ☐ 3I Rotating Biological Contactors
- ☐ 8B Secondary Treatment
- ☐ 3F Spray Irrigation/Land Appl.
- ☐ 3G Stabilization Ponds
- ☐ 8C Tertiary Treatment
- ☐ 3M Trtmt. by Plain Aeration
- ☐ 3H Trickling Filtration
- ☐ 6L Two Stage Act. Sludge
- ☐ 6M Vegetative Filter

Discharge Type

- ☐ 8H Constructed Wetland
- ☒ 4A Disch. to Surface Water
- ☐ 4B Ocean Discharge
- ☐ 4C Reuse/Recycle-Treated Eff.
- ☐ 4E Reuse/Sale of Wastewater
- ☐ 6J Subsurface Seepage
- ☐ 4D Underground Injection

Sludge Management

- ☐ 5A Aerobic Digestion
- ☐ 5B Anaerobic Digestion
- ☐ 5C Belt Filtration
- ☐ 5D Centrifugation
- ☐ 5E Chemical Conditioning
- ☐ 5F Chlorine Treatment
- ☐ 5G Composting
- ☐ 5H Drying Beds
- ☐ 5I Elutriation
- ☐ 5J Flotation Thickening
- ☐ 5K Freezing (Sludge Treatment)
- ☐ 5L Gravity Thickening
- ☐ 5M Heat Drying
- ☐ 5N Heat Treatment
- ☐ 5O Incineration
- ☐ 5P Land Application (Sludge)
- ☐ 5Q Landfill
- ☐ 6E Lime Stabilization
- ☐ 5R Pressure Filtration
- ☐ 5S Pyrolysis
- ☐ 5T Sludge Lagoons
- ☐ 6K Thermophilic Digestion
- ☐ 5U Vacuum Filtration
- ☐ 5V Vibration
- ☐ 5W Wet Air Oxidation

Preliminary, Primary, Filtration, Other Treatment

- ☐ 1C Diat. Earth Filtration
- ☐ 1Y Equalization
- ☐ 6A Excess Flow Treatment
- ☐ 1H Flotation
- ☐ 4H Grease Removal
- ☐ 1L Grinding (Comminutors)
- ☐ 1M Grit Removal
- ☐ 3N Holding/Detention Pond
- ☐ 6B Imhoff Tank
- ☐ 1Z Intermittent Sand Filters
- ☐ 6C Irradiation/Beta Ray
- ☐ 6D Irradiation/Gamma Ray
- ☐ 1N Microstraining (Microscreening)
- ☐ 1P Moving Bed Filters
- ☐ 1Q Multimedia Filtration
- ☐ 2M Odor Control
- ☐ 6F Oil-Water Separator
- ☐ 6G Pasteurization
- ☐ 6H Phosphorus Removal
- ☐ 3L Post Aeration
- ☐ 3E Pre-Aeration
- ☐ 8A Primary Treatment
- ☐ 1R Rapid Sand Filtration
- ☐ 1S Reverse Osmosis
- ☐ 1T Screening
- ☐ 1U Sedimentation (Settling)
- ☐ 1V Slow Sand Filtration
- ☐ 4F Temperature Control

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

LESS 1.1
ADMB
12

Subject Fansteel Inc.

Data ILG 250013

Reviewed by Richard E. Pinney

Date 3-11-94

	Flow (MGD)	TSS (mg/l)	pH	(Differential) Temp. °F	Ni (mg/l)	Phos (mg/l)	Toluene (mg/l)	Zn (mg/l)	Art. Hardness
-94	.0025	<10	7.42	6.3	<.01	<.09	<.001	1.05	<5
2-93	.000576	<10	8.51	7.2					
1-93	.004	N.D.	8.1	5.4					
1-93	.004	<10	8.5	7.0	.036	.1	<.0005	.2	10
1-93	.008	10	8.02	5.4					
1-93	.030747	ND	8.2	0					
-93	.150682	ND	8.3	-7	ND	.4	ND	.6	ND
-93	.022594	ND	8.1	73.4					
1-93	.018623	9.0	8.2	7.2					
1-93	.040449	15	8.2	.7	ND	.1	ND	1.4	2.7
1-93	.005852	<5	8.7	1.8					
1-93	.020367	<5	8.2	2.2					
-93	.027953	<5	8.4	.1	<.1	.2	<.002	.91	<1.0

Fansteel

November 30, 1993

Certified Mail
Return Receipt Requested

Illinois Environmental Protection Agency
DWPC, Permits, #15
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

Attention: Ms. Marilyn Davenport

Gentlemen:

Enclosed herewith is the NPDES permit renewal application for Fansteel's North Chicago facility. I apologize for the delay but I miscalculated the 180 day requirement.

Please contact me if you have any questions.

Very truly yours,

FANSTEEL INC.

Gene L. Kacmarcik

Gene L. Kacmarcik
Supervisor, Facility Engineering

jjt
Enclosures

RECEIVED
DEC 02 1993
Environmental Protection Agency
WPC Permit Section

FORM 1 GENERAL	EPA	U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)	I. EPA NUMBER	II. EPA NUMBER
			FILED 005130786	D
GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.				
RECEIVED DEC 02 1993 Environmental Protection Agency				

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK "X"			SPECIFIC QUESTIONS	MARK "X"		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.?		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.?		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above?	X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.?		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes?		X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water?		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons?		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy?		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area?		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area?		X	

III. NAME OF FACILITY
SHIP **FANSTEEL INC.**

IV. FACILITY CONTACT
A. NAME & TITLE (last, first, & title) **KAC MARCIK, GENE, FACILITY ENGR.**
B. PHONE (area code & no.) **708 689 4900**

V. FACILITY MAILING ADDRESS
A. STREET OR P.O. BOX **ONE TANTALUM PLACE**
B. CITY OR TOWN **NORTH CHICAGO**
C. STATE **IL**
D. ZIP CODE **60064**

VI. FACILITY LOCATION
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER **ONE TANTALUM PLACE**
B. COUNTY NAME **LAKE**
C. CITY OR TOWN **NORTH CHICAGO**
D. STATE **IL**
E. ZIP CODE **60064**
F. COUNTY CODE (if known)

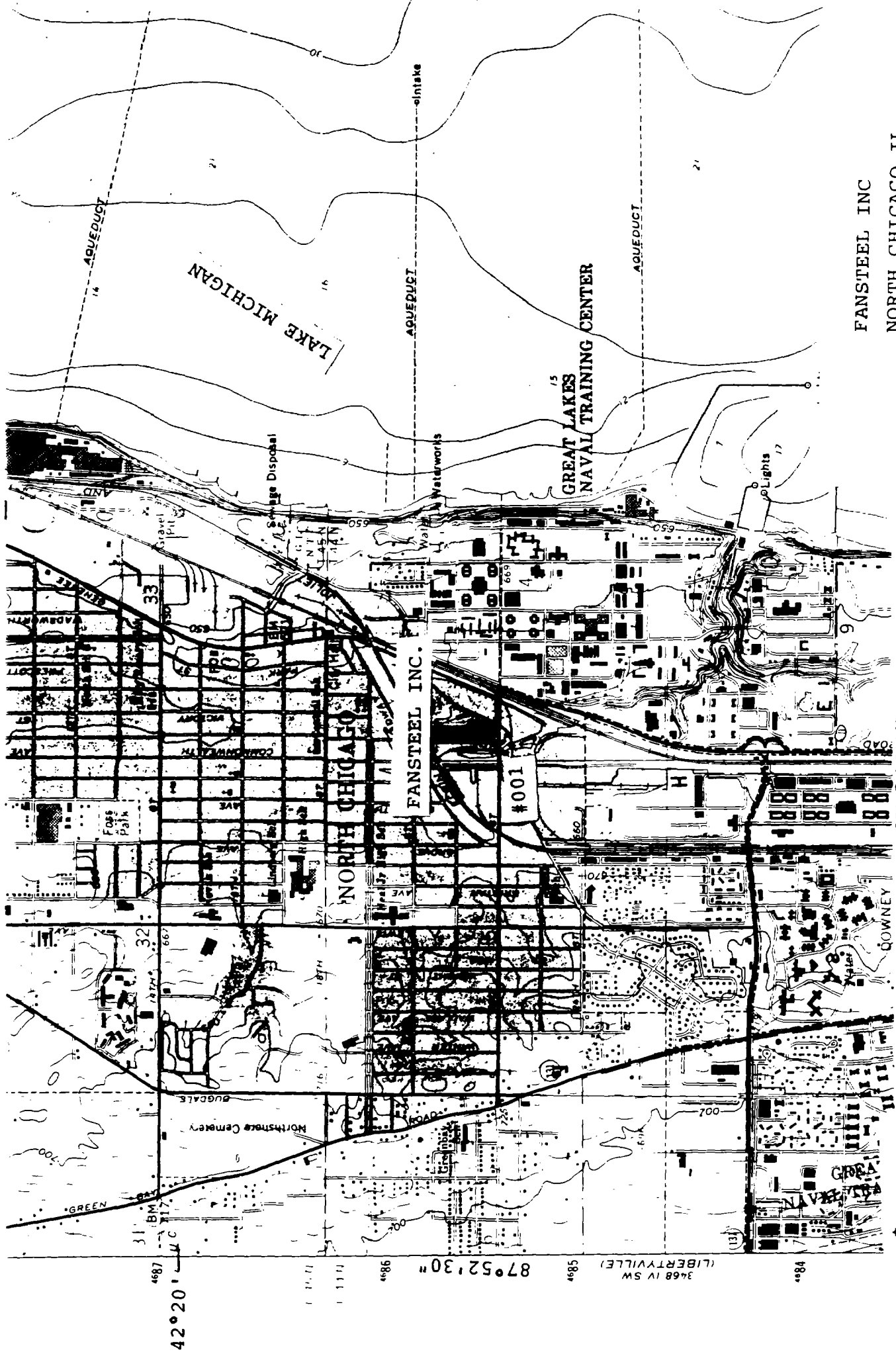
Please type or print in the unshaded areas only		EPA Number (copy from item 1 of Form 1) ILD005130786		Form Approved OMB No. 2040-0088 Approval dates 7-31-84			
Form 2E NPDES		EPA Facilities Which Do Not Discharge Process Wastewater					
I. Receiving Waters							
For this outfall, list the latitude and longitude, and name of the receiving water(s).							
Outfall Number (list)	Latitude		Longitude		Receiving Water (name)		
	Deg	Min	Sec	Deg		Min	Sec
001	42	19	18	87	50	38	Perribone Creek
II. Discharge Date (If a new discharger, the date you expect to begin discharging)							
N/A							
III. Type of Waste							
A. Check the box(es) indicating the general type(s) of wastes discharged.							
<input type="checkbox"/> Sanitary Wastes <input type="checkbox"/> Restaurant or Cafeteria Wastes <input checked="" type="checkbox"/> Noncontact Cooling Water <input type="checkbox"/> Other Nonprocess Wastewater (Identify)							
B. If any cooling water additives are used, list them here. Briefly describe their composition if this information is available.							
N/A							
IV. Effluent Characteristics							
A. Existing Sources — Provide measurements for the parameters listed in the left-hand column below, unless waived by the permitting authority (see instructions).							
B. New Dischargers — Provide estimates for the parameters listed in the left-hand column below, unless waived by the permitting authority. Instead of the number of measurements taken, provide the source of estimated values (see instructions).							
Pollutant or Parameter	(1) Maximum Daily Value (Provide units)		(2) Average Daily Value (last year) (Provide units)		(3) Number of Measurements Taken (last year)	(4) Source of Estimate (If new discharger)	
	Mass	Concentration	Mass	Concentration			
Biochemical Oxygen Demand (BOD)	<0.90 Kg	<1.50 mg/l	<0.20 Kg	<1.50 mg/l	1	-	
Total Suspended Solids (TSS)	2.90 Kg	15.0 mg/l	.53 Kg	4.71 mg/l	12	-	
Fecal Coliform (if believed present or if sanitary waste is discharged) N/A	-	-	-	-	-	-	
Total Residual Chlorine (if chlorine is used) N/A	-	-	-	-	-	-	
Oil and Grease	.41 Kg	< 3.0 mg/l	.17 Kg	<1.68 mg/l	4	-	
*Chemical oxygen demand (COD)	<14.3 Kg	<25.0 mg/l	<2.9 Kg	<25.0 mg/l	1	-	
*Total organic carbon (TOC)	2.9 Kg	5.0 mg/l	0.2 Kg	5.0 mg/l	1	-	
Ammonia (as N)	0.6 Kg	< 1.0 mg/l	0.1 Kg	<1.0 mg/l	1	-	
Discharge Flow	Value .1920 MGD		.0448 MGD		12	-	
pH (give range)	Value 7.8 - 8.7		8.22		12	-	
Temperature (Winter)	2.5 °C		5.6 °C		Monthly	-	
Temperature (Summer)	25.0 °C		20.3 °C		Monthly	-	
*If noncontact cooling water is discharged							

Attachment "A"

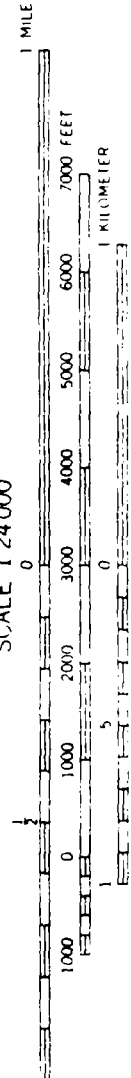
The present NPDES permit requires sampling for Toluene for the quarterly reports. The laboratory results have been:

3rd Quarter 1993	N.D.
2nd Quarter 1993	N.D.
1st Quarter 1993	<0.002 mg/l
4th Quarter 1992	<1.0 ug/l
3rd Quarter 1992	<1.0 ug/l
2nd Quarter 1992	<1.0 ug/l
1st Quarter 1992	N.D.
4th Quarter 1991	<1.0 ug/l
3rd Quarter 1991	N.D.
2nd Quarter 1991	<1.0 ug/l
1st Quarter 1991	N.D.
4th Quarter 1990	<0.001 mg/l
3rd Quarter 1990	<0.001 mg/l
2nd Quarter 1990	<0.001 mg/l
1st Quarter 1990	<0.001 mg/l
4th Quarter 1989	<0.001 mg/l
3rd Quarter 1989	<0.001 mg/l

We request that the requirement in the NPDES permit to test Toluene be eliminated since no or only insignificant amounts have been detected.



FANSTEEL INC
NORTH CHICAGO, IL



1960
PHOTOREVISED 1972 AND 1980
DMA 3468 IV SE - SERIES V863
42087-C7-1F-024
SE 4 WAUKEGAN 15' QUADRANGLE
1960
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET - DATUM IS LOW WATER 5.95 FEET
0°33' 10 MILS
0°33' 10 MILS
0°33' 10 MILS



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-0610

NOV 12 1993

Fansteel, Inc.
One Tantulum Place
North Chicago, Illinois 60064

Re: Fansteel, Inc.
NPDES Permit No. IL0002411
Second Reminder of Expiration Date

Gentlemen:

Our records indicate that we have not received a response to our previous request that you submit an application for the renewal of the subject permit.

The subject permit expires on May 1, 1994; a proper application for re-issuance of your permit must be submitted.

We are again requesting that you submit the appropriate application for the renewal of your permit. If circumstances are such that you feel the permit should be terminated, please send written notice to this effect to the DWPC, Permit Section, at the address shown above.

If you have any questions, please call 217/782-0610.

Sincerely,

Marilyn Davenport
Office Administrator
Permit Section
Division of Water Pollution Control

MD:PD:kw/2140v,97

cc: Maywood R.O.
Records
Binds

APP - REC - 12/32/93



State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-0610

August 13, 1993

Fansteel, Inc.
One Tantulum Place
North Chicago, Illinois 60064

Re: Fansteel, Inc.
NPDES Permit No. IL0002411
Reminder of Expiration Date

Gentlemen:

Our records indicate that the subject NPDES permit expires on May 1, 1994. That permit requires that you submit a proper application for the re-issuance of the permit not later than 180 days prior to the expiration date.

For your convenience, we have enclosed application forms, which we believe to be appropriate for your situation, with instructions and other pertinent material. If you desire a set of forms other than those enclosed, or if you have other questions, please call me at the indicated telephone number.

Sincerely,

Marilyn Davenport

Marilyn Davenport *msp*
Office Administrator
Permit Section
Division of Water Pollution Control

MD:bjh/1545v/85

Enclosures

cc: Records Unit
Maywood Region



Illinois Environmental Protection Agency • P. O. Box 19276, Springfield, IL 62794-9276

217/782-0610

Fansteel, Inc.
Fansteel, Inc.
NPDES Permit No. IL0002411
Final Permit

July 28, 1989

Fansteel, Inc.
One Tantulum Place
North Chicago, Illinois

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. The failure of you to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit as issued is effective as of the date indicated on the first page of the Permit. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board prior to the effective date.

Should you have questions concerning the Permit, please contact Ed Kane at the telephone number indicated above.

Very truly yours,

Thomas G. McSwiggin, R.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:TRK:ETK:dks/1623k

Attachment: Final Permit

cc: USEPA SHQP/With Enclosure
Region II/With Enclosure
Records Unit ✓
Compliance Assurance Section/with enclosure

NPDES Permit No. IL0002411

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

P.O. Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: May 1, 1994

Issue Date: July 27, 1989

Effective Date: August 26, 1989

Name and Address of Permittee:

Fansteel, Inc.
One Tantulum Place
North Chicago, Illinois

Facility Name and Address:

Fansteel, Inc.
One Tantulum Place
North Chicago, Illinois 60064
Lake County

Discharge Number and Name:

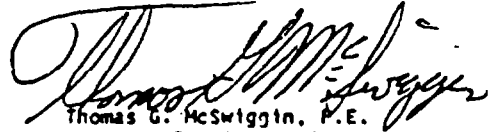
001 Non-contact cooling water
and stormwater

Receiving Waters

Pettibone Creek via storm sewer
tributary to Lake Michigan

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the Clean Water Act, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.


Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:EK:dks/sp/1774k

4032000016

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS		CONCENTRATION		SAMPLE FREQUENCY	SAMPLE TYPE
	lbs/day		LIMITS mg/l			
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		
1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:						
Outfall(s): 001						
Flow (MGD)	Shall be reported as 30 day Avg. and Daily Max.				Measure When Monitoring	
pH	See Special Condition 1				1/Month	Grab
Temperature	See Special Condition 2				1/Month	Grab
Oil and Grease*			15	30	Quarterly	Grab
Suspended Solids Total			15	30	1/Month	Composite
Nickel*			1.0	2.0	Quarterly	Composite
Phosphorous*			1.0	2.0	Quarterly	Composite
Zinc*			1.0	2.0	Quarterly	Composite
Toluene*					Quarterly	Composite

*Sampling results shall be submitted with the January, April, July and October Discharge Monitoring Report Forms.

(0 3 2 0 0 0 1 6)

Special Conditions

1. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.
2. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:
 - A. Maximum temperature rise above natural temperature must not exceed 5°F (2.8°C).
 - B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 3°F (1.7°C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)
 - C. The monthly maximum value shall be reported on the DMR form.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

3. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the City of North Chicago storm sewer.
4. For the purpose of this permit, the discharge is limited to non-contact cooling water and stormwater, free from process and other wastewater discharges. In the event that the permittee shall require the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.
5. The permittee shall record monitoring results on Discharge Monitoring Report forms using one such form for each discharge each month. The completed Discharge Monitoring Report form shall be submitted monthly to IEPA, no later than the 15th of the following month, unless otherwise specified by the Agency, to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

Records Unit

NPDES Mat.
Request

Fansteel
Metals

January 13, 1987

RECEIVED
Compliance Assurance Section

JAN 16 1987

Environmental Protection Agency
STATE OF ILLINOIS

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, IL 62706

Attention: Compliance Assurance Section

Subject: NPDES Discharge Monitoring Report

Reference: NPDES Permit IL 0002411

Gentlemen:

Enclosed is our discharge monitoring report for the month of
December, 1986.

We have shut down our manufacturing operation on the south side
of the street on September 30, 1986. We have been cleaning up
the facility and removing all the equipment for the sale of the
facility and property. With the future sale of this property, we
will be reporting only one outfall (#001) from our facility versus
the present two.

Please contact me if you have any questions.

Yours very truly,

FANSTEEL/METALS


P. F. Ziegler
General Manager

PFZ:mb

Enclosure

RECEIVED
OPERATIONS SECTION - REG. 2

JAN 22 1987

RECEIVED

RECEIVED

MAR 24 1987

Environmental Protection Agency
Division of Water Pollution Control
Permit Section-Springfield
State of Illinois

**Fansteel
Metals**

Company Name: FANSTEEL METALS ADDRESS: 60064 PHONE: (312) 689-4900 FAX: (312) 689-4900

March 18, 1987

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

Attention: Mr. Rick Pinneo

Subject : NPDES Permit No. IL0002411

Dear Mr. Pinneo:

Please be advised that the property served by Outfall #002 was vacated by Fansteel and ownership transferred to another party on December 30, 1986. Fansteel has therefore discontinued the sampling of outfall #002 and will report on #001 only.

Please contact me if you have any questions.

Yours very truly,

FANSTEEL/METALS



P.F. Ziegler
General Manager

PFZ:cp

cc: G.L. Kacmarcik

0202000147



Illinois Environmental Protection Agency - 2200 Churchill Road, Springfield, IL 62706

217/782-0670

Fansteel Inc.
Fansteel Inc.
NPDES Permit No. IL0002411
Modification of NPDES Permit (After Public Notice)
May 29, 1987

Fansteel Inc.
One Tantalum Place
North Chicago, IL 60064

Gentlemen:

The Illinois Environmental Protection Agency has reviewed the request for modification of the above-referenced NPDES Permit and issued a public notice based on that request. The final decision of the Agency is to modify the Permit as follows:

To eliminate Outfall 002 as a discharge.

Enclosed is a copy of the modified Permit.

Should you have any question or comments regarding the above, please contact Richard E. Pimio of my staff.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TCM:TRK:PEP:st:1872g,15

Enclosure: Modified Permit

cc: USEPA SWQP/With Enclosure
Region 2/With Enclosure
Records Unit ✓
Compliance Assurance Section/with enclosure

NPDES Permit No. IL0002411

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

Springfield, Illinois 62706

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: July 15, 1989

Issue Date: August 3, 1984

Modification Issue Date: May 29, 1987

Effective Date: September 2, 1984

Modification Effective Date: June 28, 1987

Name and Address of Permittee:

Facility Name and Address:

Fansteel Inc.
One Tantalum Place
North Chicago, Illinois 60064

Fansteel Inc.
One Tantalum Place
North Chicago, Illinois 60064

Discharge Number and Name:

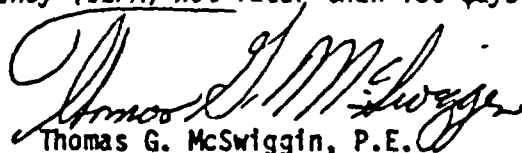
Receiving Waters

001 Non-contact cooling
water and stormwater

Pettibone Creek via storm sewer
tributary to Lake Michigan

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:GS:jld/10560/3

Modification Date: May 29, 1987

Page 2

NPDES Permit No. IL0002411

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS		CONCENTRATION		SAMPLE	SAMPLE
	lbs/day		LIMITS mg/l			
	30 DAY	DAILY	30 DAY	DAILY		
	AVG.	MAX.	AVG.	MAX.	FREQUENCY	TYPE

1. From the effective date of this permit until July 15, 1989, the effluent of the following discharge shall be monitored and limited at all times as follows:

Outfall: 001

Flow, mgd					1/Month	Single Reading
Suspended Solids Total			15	30	1/Month	Composite
pH	shall be in the range of 6.0 to 9.0				1/Month	Grab
Temperature	See Special Condition No. 2				1/Month	Grab
Oil and Grease					Quarterly	Grab

NPDES Permit No. IL0002411

Special Conditions

1. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the City of North Chicago storm sewer.

2. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

- A. Maximum temperature rise above natural temperature must not exceed 50F (2.80C).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 30F (1.70C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

3. Outfall 001 Monitoring - The permittee shall monitor and report concentrations (in mg/l) of the following listed parameters at 3 month intervals. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted with the January, April, July, and October Discharge Monitoring Report Forms to both IEPA and USEPA unless otherwise specified by the Agency. The parameters to be sampled are:

Nickel
Phosphorous as P (STORET number 00665)
Toluene
Zinc

NPDES Permit No. IL0002411

Special Conditions

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states. Where constituents are commonly measured as other than total, the word "total" is inserted for clarity.

In addition, the permittee shall monitor any new toxic substances as defined by the Clean Water Act (CWA) following notification by the Illinois Environmental Protection Agency.

A composite sample shall consist of at least 8 aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of the facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite shall be flow proportional.

Sampling shall be conducted on two sampling days when stormwater runoff is occurring and shall commence at the start of the stormwater discharge. The permittee shall report the date and time of sampling and whether stormwater is represented in the results.

If the permittee, after monitoring the above list four times, can demonstrate to the satisfaction of the Agency that there is no significant discharge of the designated parameters and that, in that time, the parameters have not exceeded the effluent limit and/or water quality limit set for said parameters, upon written request by the permittee, the Agency shall review the monitoring requirements and may, at their discretion, revise or waive these monitoring requirements by letter without public notice or opportunity for hearing.

4. For the purpose of this permit, this discharge is limited to non-contact cooling water and stormwater runoff, free from process and other wastewater discharges. In the event that the permittee shall require the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.

5. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

NPDES Permit No. IL0002411

Special Conditions

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: Compliance Assurance Section

Additionally, Discharge Monitoring Report forms shall be mailed to United States Environmental Protection Agency in Chicago on a quarterly basis. The permittee shall submit the reports as follows, unless otherwise specified by the permitting authority.

Period	Report Due At
	U.S. Environmental Protection Agency
Jan, Feb, Mar	April 28th
April, May, June	July 28th
July, Aug, Sept	October 28th
Oct, Nov, Dec	January 28th

Reports shall be addressed to United States Environmental Protection Agency as follows:

NPDES Compliance Unit
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604



Illinois Environmental Protection Agency • 2200 Churchill Road, Springfield, IL 62706

217/782-0610

Fansteel Incorporated
Fansteel Incorporated - North Chicago
NPDES Permit No. IL0002411
Final Permit

AUG 03 1984

Fansteel Inc.
One Tantalum Place
North Chicago, Illinois 60064

Gentlemen:

Attached is the final NPDES Permit for your discharge. The Permit as issued covers discharge limitations, monitoring, and reporting requirements. The failure of you to meet any portion of the Permit could result in civil and/or criminal penalties. The Illinois Environmental Protection Agency is ready and willing to assist you in interpreting any of the conditions of the Permit as they relate specifically to your discharge.

The Permit as issued is effective as of the date indicated on the first page of the Permit. You have the right to appeal any condition of the Permit to the Illinois Pollution Control Board prior to the effective date.

Should you have questions concerning the Permit, please contact Gerry Siekerka at the telephone number indicated above.

Very truly yours,

Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:GLS:jld/10060/38

Enclosure: Final Permit

cc: USEPA/With Enclosure
Region II/With Enclosure
Permit Section
Records Unit
Consulting Engineer

NPDES Permit No. IL0002411

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

Springfield, Illinois 62706

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: July 15, 1989

Issue Date: August 3, 1984
Effective Date: September 2, 1984

Name and Address of Permittee:

Facility Name and Address:

Fansteel Inc.
One Tantalum Place
North Chicago, Illinois 60064

Fansteel Inc.
One Tantalum Place
North Chicago, Illinois 60064

Discharge Number and Name:

Receiving Waters

001 Non-contact cooling
water and stormwater


Pettibone Creek via storm sewer
tributary to Lake Michigan

002 Non-contact cooling
water and stormwater

Pettibone Creek via storm sewer
tributary to Lake Michigan

In compliance with the provisions of the Illinois Environmental Protection Act, Subtitle C and/or Subtitle D Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:GS:jd/1056D/3

NPDES Permit No. IL0002411

Effluent Limitations and Monitoring

PARAMETER	LOAD LIMITS lbs/day		CONCENTRATION LIMITS mg/l		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.		

1. From the effective date of this permit until July 15, 1989, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 and 002

Flow, mgd					1/Month	Single Reading
Suspended Solids Total			15	30	1/Month	Composite
pH	shall be in the range of 6.0 to 9.0				1/Month	Grab
Temperature	See Special Condition No. 2				1/Month	Grab
Oil and Grease					Quarterly	Grab

Special Conditions

1. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the City of North Chicago storm sewer.

2. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Section 302.211, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended:

- A. Maximum temperature rise above natural temperature must not exceed 50F (2.80C).
- B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 30F (1.70C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
0F	60	60	60	90	90	90	90	90	90	90	90	60
0C	16	16	16	32	32	32	32	32	32	32	32	16

3. Outfall 001 and 002 Monitoring - The permittee shall monitor and report concentrations (in mg/l) of the following listed parameters at 3 month intervals. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted with the January, April, July, and October Discharge Monitoring Report Forms to both IEPA and USEPA unless otherwise specified by the Agency. The parameters to be sampled are:

Nickel
Phosphorous as P (STORET number 00665)
Toluene
Zinc

Special Conditions

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states. Where constituents are commonly measured as other than total, the word "total" is inserted for clarity.

In addition, the permittee shall monitor any new toxic substances as defined by the Clean Water Act (CWA) following notification by the Illinois Environmental Protection Agency.

A composite sample shall consist of at least 8 aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of the facility over a 24-hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite shall be flow proportional.

Sampling shall be conducted on two sampling days when stormwater runoff is occurring and shall commence at the start of the stormwater discharge. The permittee shall report the date and time of sampling and whether stormwater is represented in the results.

If the permittee, after monitoring the above list four times, can demonstrate to the satisfaction of the Agency that there is no significant discharge of the designated parameters and that, in that time, the parameters have not exceeded the effluent limit and/or water quality limit set for said parameters, upon written request by the permittee, the Agency shall review the monitoring requirements and may, at their discretion, revise or waive these monitoring requirements by letter without public notice or opportunity for hearing.

4. For the purpose of this permit, this discharge is limited to non-contact cooling water and stormwater runoff, free from process and other wastewater discharges. In the event that the permittee shall require the use of water treatment additives, the permittee must request a change in this permit in accordance with the Standard Conditions -- Attachment H.

5. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permit authority.

NPDES Permit No. IL0002411

Special Conditions

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: Compliance Assurance Section

Additionally, Discharge Monitoring Report forms shall be mailed to United States Environmental Protection Agency in Chicago on a quarterly basis. The permittee shall submit the reports as follows, unless otherwise specified by the permitting authority.

Period	Report Due At
	U.S. Environmental Protection Agency
Jan, Feb, Mar	April 28th
April, May, June	July 28th
July, Aug, Sept	October 28th
Oct, Nov, Dec	January 28th

Reports shall be addressed to United States Environmental Protection Agency as follows:

NPDES Compliance Unit
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

NPDES Permit No. IL0002411

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

Springfield, Illinois 62706

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: June 30, 1981

Issue Date: Jan. 9, 1979
Effective Date: Feb. 8, 1979

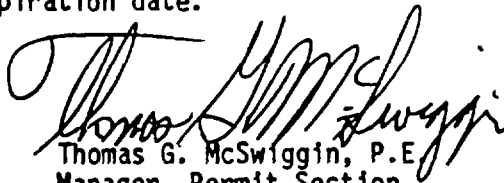
Permittee: Fansteel Inc.

Facility Name and Address: Fansteel Inc., Number One Tantalum Place,
North Chicago, Illinois 60064, Lake County

Receiving Waters: Pettibone Creek

In compliance with the provisions of the Illinois Environmental Protection Act, the Chapter 3 Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:YS:nk/sp5134a

NPDES Permit No. IL0002411

ATTACHMENT B

Effluent Limitations and Monitoring

Discharge Number(s): 001 and 002

Discharge Name(s): 001: Non-contact cooling water and storm water run-off from north side of plant.
 002: Non-contact cooling water and stormwater run-off from south side of plant.

From effective date of permit until June 30, 1981, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

PARAMETER	CONCENTRATION LIMITS mg/l			LOAD LIMITS lbs/day (Kg/day)			SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY	7 DAY	DAILY	30 DAY	7 DAY	DAILY		
	AVG.	AVG.	MAX.	AVG.	AVG.	MAX.		
Flow (MGD)							1/Month	
pH	See Attachment B Continued						1/Month	Grab
Temperature	See Attachment B Continued						1/Month	Grab
Total Suspended								
Solids			15				1/Month	Composite

ATTACHMENT B CONTINUED

1. The pH shall be in the range 6.0 to 9.0.
2. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into municipal storm sewer.
3. Discharge of wastewater from this facility must not alone or in combination with other sources cause the receiving stream to violate the following thermal limitations at the edge of the mixing zone which is defined by Rule 201(a), Illinois Pollution Control Board Rules and Regulations, Chapter 3: Water Pollution, as amended:
 - A. Maximum temperature rise above natural temperature must not exceed 50F (2.780C).
 - B. Water temperature at representative locations in the main river shall not exceed the maximum limits in the following table during more than one (1) percent of the hours in the 12-month period ending with any month. Moreover, at no time shall the water temperature at such locations exceed the maximum limits in the following table by more than 30F (1.670C). (Main river temperatures are temperatures of those portions of the river essentially similar to and following the same thermal regime as the temperatures of the main flow of the river.)

	<u>Jan.</u>	<u>Feb.</u>	<u>Mar.</u>	<u>Apr.</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>
OF	60	60	60	90	90	90	90	90	90	90	90	60
0C	15.6	15.6	15.6	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	15.6

4. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: NPDES Unit (DMR)

NPDES Permit No. IL0002411

ATTACHMENT B CONTINUED

5. The completed Discharge Monitoring Report forms shall be retained by the permittee for a period of six months and then shall be mailed and received by the IEPA in accordance with the following schedule, unless otherwise specified by the permitting authority.

Period	Received by IEPA
March, April, May, June, July, August	September 15
September, October, November, December, January, February	March 15

6. In the event when oil spill occurs, permittee shall analyze the grab sample and report to the Agency.
7. For the purpose of this permit the discharge 001 is limited to non-contact cooling water and storm water and discharge 002 is limited to non-contact cooling water from air conditioning and storm water free from process and any other waste water discharges.

14. The permittee shall take all reasonable steps to minimize any adverse impact on waters of the State resulting from non-compliance with any effluent limitations specified in this permit. The permittee will also provide accelerated or additional monitoring as necessary to determine the nature and the impact of the non-complying discharge(s).

15. The permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures either by means of alternate power sources, standby generators or retention of inadequately treated effluent. Should the treatment works not include the above capabilities at the time of permit issuance, the permittee must furnish within 120 days to the Agency, for approval, plans for such facilities and an implementation schedule for their installation.

16. The permittee shall effectively monitor the operation and efficiency of all treatment and control facilities and the quantity and quality of the treated discharge. The permittee must obtain the equipment necessary to perform the tests designated by the influent and effluent limitations indicated in Schedule B, and A if included, or be able to utilize other laboratory services to determine and report the necessary results. Samples and measurement taken as required herein shall be representative of the volume and nature of the monitored discharge. Monitoring data required for this permit shall be summarized on a calendar month basis. Individual reports for each reporting period are to be submitted on the basis indicated in Schedule B and A if included of this permit, and/or on the appropriate forms as indicated by the Agency. Original copies of the Discharge Monitoring Report form properly signed and completed must be submitted and postmarked within fifteen (15) days after the end of the reporting period to: Illinois EPA, DWPC, 2200 Churchill Road, Springfield, Illinois, 62706, Attention: NPDES Unit (DNR).

17. The permittee shall record for all samples the date and time of sampling, the sampling method used, the date that analyses were performed, the identity of the analyses, and the results of all required analysis and measurements. All sampling and analytical records required by this permit shall be retained for a minimum of three years. The permittee shall also retain all original records from any continuous monitoring instrumentation and any calibration and maintenance records for a minimum of three years. The periods will be extended on a day-for-day basis during the course of any unresolved litigation, or when so requested by the Agency.

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

18. The analytical and sampling methods used shall conform to 40 CFR Part 136 which includes selected methods from current editions of the reference manuals listed below:

- "Standard Methods for the Examination of Water and Wastewaters", APHA, Washington, D.C.
- "A.S.T.M. Standards, Part 31, Water"; American Society for Testing and Materials, Philadelphia, Pennsylvania.
- "Methods for Chemical Analysis of Water and Waste", EPA, Technology Transfer.

The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

19. Except for data determined to be confidential pursuant to Section 7 or 7.1 of the Act or Section 308 of the FWPCA, all monitoring reports recorded by this permit shall be available for public inspection at the offices of the Agency. Knowingly making any false statement on any such report may result in the implementation of criminal penalties as provided for in Section 309 of the FWPCA and Section 44 of the Act.

20. The permittee shall at all times maintain in good working order and operate as efficiently as possible any facilities or systems of control installed by the permittee to achieve compliance with the terms and conditions of the permit.

21. Owners of publicly owned or publicly regulated treatment works shall require that any industrial user of such treatment works comply with federal requirements concerning:

- User charges and recovery of construction costs pursuant to Section 204(b) of the FWPCA, and applicable regulations in 40 CFR 35;

b. Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the FWPCA;

c. Inspection, monitoring and entry pursuant to Section 308 of the FWPCA.

22. Collected screenings, slurrries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.

23. If any interim effluent limitations and/or schedule of compliance is provided for in this permit pursuant to Rule 409 of Chapter 3, the permittee is required to take such action to bring the discharge into compliance within the shortest period of time possible. If the Agency determines that the permittee is not taking timely action to secure the appropriate grant funding, the Agency may take the following action:

- Place the permittee on restricted status.
- Initiate appropriate enforcement action.

24. The discharge(s) authorized by this permit shall comply with, in addition to the requirements of the permit, all applicable provisions of Chapter 3 or applicable orders of the Board which are consistent with the FWPCA or regulations adopted thereunder.

25. The permittee shall not commence construction or modification of any treatment works, disposal well, wastewater source, or process modification until an authorization to construct has been issued pursuant to Rule 910 of Chapter 3. If an authorization to construct is issued, it is hereby incorporated as a condition of this permit.

26. The permittee is not authorized to discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Agency not later than 180 days prior to the expiration date.

27. "This permit may be modified or revised, or, alternatively revoked and reissued, to comply with an applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et. al. v. Russell E. Train, 8 ENE 2120 D.D.C. 1976, if the effluent limitation so issued:

- is different in conditions or more stringent than any effluent limitation in the permit; or
- controls any pollutant not limited in the permit."

This permit may be revised, following notice by the Agency that applicable effluent limitations covered by the Natural Resources Defense Council, Inc. et.al. v. Train, 8 E.R.C. 2120 (D.D.C. 1976) will not be promulgated, to incorporate any applicable effluent limitation determined under Section 402(a)(1) of the Federal Water Pollution Control Act. (FWPCA) Amendments of 1972 as necessary to carry out the provisions of Section 301(b)(2)(a) of the FWPCA, if the effluent limitation so determined;

- Is more stringent than any effluent limitation in the permit; or
- Controls any pollutant not limited in the permit.

28. This permit may be revised to incorporate, if necessary, applicable provisions of an approved 208 plan pursuant to Section 208 of the FWPCA.

29. Applicable new or amended Pollution Control Board Rules or Regulations, Regulations promulgated pursuant to the FWPCA or Amendments to the FWPCA shall be incorporated herein and become part hereof when the Rule, Regulation or Amendment becomes effective. The Agency will notify each affected NPDES permittee of such incorporation.

30. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

ATTACHMENT H

Standard Conditions

Act means the Illinois Environmental Protection Act, Ch. 111 1/2 Ill. Rev. Stat., Sec. 1001-1061 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Chapter 3 means the Illinois Pollution Control Board Rules and Regulations, Chapter 3: Water Pollution.

Daily maximum means the maximum unit magnitude discharged during any calendar day.

Director means the Director of the Illinois Environmental Protection Agency.

FWPCA means the Federal Water Pollution Control Act, as amended, 33 U.S.C. 466 et seq., Public Law 95-217, approved December 27, 1977 (commonly referred to as the Clean Water Act).

NPDES means the National Pollutant Discharge Elimination System.

Weekly average means the arithmetic mean of samples collected during a period of seven consecutive calendar days, for the purposes of monitoring and reporting.

Monthly average means the arithmetic mean of samples collected during a calendar month for purposes of monitoring and reporting. Alternatively, monthly average may be construed by the Illinois Environmental Protection Agency to be defined as the arithmetic mean of samples collected during any period of 30 consecutive calendar days.

1. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application or, if such discharges will not violate the effluent limitations specified in this permit, by notice to the Agency of such changes. Following such notice, the permit may be revised to specify and limit any pollutants not previously limited.
2. In case of conflict between these standard conditions and any special conditions attached to this permit, the special conditions shall govern.
3. Except as otherwise provided in the Permit, all waters of the State shall be kept free from unnatural surge or bottom deposits, floating solids, visible oil, odor, unnatural plant or algae growth, unnatural color or turbidity, visible foam or matter in concentrations or combinations toxic or harmful to human, animal, plant or aquatic life of other than natural origin.
4. Pursuant to Chapter 3, this permit may be modified, suspended or revoked in whole or in part during its term for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of the permit (including, but not limited to, schedule of compliance and conditions concerning monitoring, entry, and inspection);
 - b. Obtaining a permit by misrepresentation or a failure to disclose fully all relevant facts; or
 - c. A change in any circumstance that mandates either a temporary or permanent reduction or elimination of the permitted discharge.
5. This permit may not be assigned or transferred. In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Agency.
6. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
7. The permittee shall allow any agent duly authorized by the Agency and/or the United States Environmental Protection Agency upon the presentation of credentials:
 - a. To enter the permittee's premises where effluent sources are located or in which any records are required to be kept under the terms and conditions of this permit.

- b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit.
 - c. To inspect at reasonable times any monitoring equipment or monitoring method required to be kept by this permit.
 - d. To sample at reasonable times any discharge of pollutants.
8. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the FWPCA and shall not be construed to relieve the permittee from civil or criminal penalties for noncompliance.
 9. Nothing in this permit shall be construed to preclude the institution of any legal action nor relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the FWPCA.
 10. Any owner of any publicly owned or regulated treatment works shall give notice to the Agency of the following:
 - a. Any new introduction of pollutants into such treatment works from a source which would be a new source as defined in Section 306 of the FWPCA if such source were discharging pollutants directly to the waters of the State;
 - b. Except as to such categories and classes of point sources or discharges which may be specified by the Agency, any new introduction of pollutants into such treatment works from a source which would be a point source subject to Section 301 of the FWPCA if it were discharging such pollutants directly to the waters of the State;
 - c. Any substantial change in volume or character of pollutants being introduced into such treatment works by a source introducing pollutants into such works at the time of issuance of the permit; and
 11. Notices shall contain information on:
 - a. The quality and quantity of wastewater to be introduced into such treatment works, and
 - b. Any anticipated impact of such change in the quantity or quality of effluent to be discharged from such publicly owned or publicly regulated treatment works.
 12. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established pursuant to Section 307(a) of the FWPCA for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit shall be revised by the Agency in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified.
 13. If for any reason the permittee does not comply with or will be unable to comply with any parameter limitation or other condition as specified in this permit, or should any unusual or extraordinary discharge of waste occur from the facilities herein permitted, the permittee shall provide the Agency with the following information in writing within five (5) days of becoming aware of the condition:
 - a. A description of the non-complying discharge (including the impact upon the receiving water).
 - b. Cause of non-compliance.
 - c. Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance.
 - d. Steps to be taken by the permittee to prevent recurrence of the condition of non-compliance.
 - e. Steps taken by the permittee to reduce and eliminate non-compliance.
 14. The diversion or bypass of any discharge from the treatment works by the permittee is prohibited except: (1) where unavoidable to prevent the loss of life or severe property damage; or, (2) where excessive storm drainage runoff would damage any facilities necessary for compliance with the terms and conditions of this permit. The permittee shall notify the Agency within 72 hours of each diversion or bypass in accordance with the procedure specified in Standard Condition 12 for reporting non-compliance. The permittee shall within 30 days after such incident submit for approval a plan to prevent recurrence of such incidents.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
APPLICATION FOR PERMIT TO DISCHARGE - SHORT FORM CFOR
AGENCY
USE

APPLICATION NUMBER							
I	L	0	0	0	2	4	1
DATE RECEIVED							
7	8	1	0	0	2		
YEAR		MO.		DAY			

To be filed only by persons engaged in manufacturing and mining

Do not attempt to complete this form before reading accompanying instructions

Please print or type

1. Name, address, location, and telephone number of facility producing discharge

A. Name Fansteel Inc.

B. Mailing address

1. Street address Number One Tantalum Place2. City North Chicago3. State Illinois4. County Lake5. ZIP 60064

C. Location

1. Street same

2. City _____

3. County _____

4. State _____

D. Telephone No. 312 / 689-4900Area
Code

2. SIC

--	--	--	--

(Leave blank)

3. Number of employees 675

If all your waste is discharged into a publicly owned waste treatment facility and to the best of your knowledge you are not required to obtain a discharge permit, proceed to item 4. Otherwise proceed directly to item 5.

4. If you meet the condition stated above, check here ☐ and supply the information asked for below. After completing these items, please complete the date, title, and signature blocks below and return this form to the proper reviewing office without completing the remainder of the form.

A. Name of organization responsible for receiving waste _____

B. Facility receiving waste:

1. Name _____

2. Street address _____

3. City _____

4. County _____

5. State _____

6. ZIP _____

5. ☒ Principal product, or raw material (Check one) Tungsten6. Principal process Reduction

7. Maximum amount of principal product produced or raw material consumed per (Check one)

Basis	Amount							
	1-99 (1)	100-199 (2)	200-499 (3)	500-999 (4)	1000-4999 (5)	5000-9999 (6)	10,000-49,999 (7)	50,000 or more (8)
A. Day								
B. Month								
C. Year								X

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Environmental Agency
DWFC, Permit Section
NPDES UNIT

OCT 2 1978

Environmental
DWPC, Permit Section
NPDES UNIT

8. Maximum amount of principal product produced or raw material consumed, reported in item 7, above, is measured in (Check one):

A. ☒ pounds B. ☐ tons C. ☐ barrels D. ☐ bushels E. ☐ square feet
F. ☐ gallons G. ☐ pieces or units H. ☐ other, specify _____

9. (a) Check here if discharge occurs all year ☒ or

(b) Check the month(s) discharge occurs:

1. ☐ January 2. ☐ February 3. ☐ March 4. ☐ April 5. ☐ May 6. ☐ June
7. ☐ July 8. ☐ August 9. ☐ September 10. ☐ October 11. ☐ November 12. ☐ December

(c) Check how many days per week: 1. ☐ 1 2. ☐ 2-3 3. ☐ 4-5 4. ☒ 6-7

10. Types of waste water discharged to surface waters only (check as applicable)

Discharge per operating day	Flow, gallons per operating day					Volume treated before discharging (percent)				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000- or more (5)	None (6)	0.1-29.9 (7)	30-64.9 (8)	65-94.9 (9)	95-100 (10)
A. Sanitary, daily average										
B. Cooling water, etc. daily average					X	X				
C. Process water, daily average										
D. Maximum per operating day for total discharge (all types)					X					

11. If any of the three types of waste identified in item 10, either treated or untreated, are discharged to places other than surface waters, check below as applicable.

Waste water is discharged to:	Average flow, gallons per operating day				
	0.1-999 (1)	1000-4999 (2)	5000-9999 (3)	10,000-49,999 (4)	50,000 or more (5)
A. Municipal sewer system					X
B. Underground well					
C. Septic tank					
D. Evaporation lagoon or pond					
E. Other, specify					

12. Number of separate discharge points: A. ☐ 1 B. ☒ 2-3 C. ☐ 4-5 D. ☐ 6 or more

13. Name of receiving water or waters: Pettibone Creek

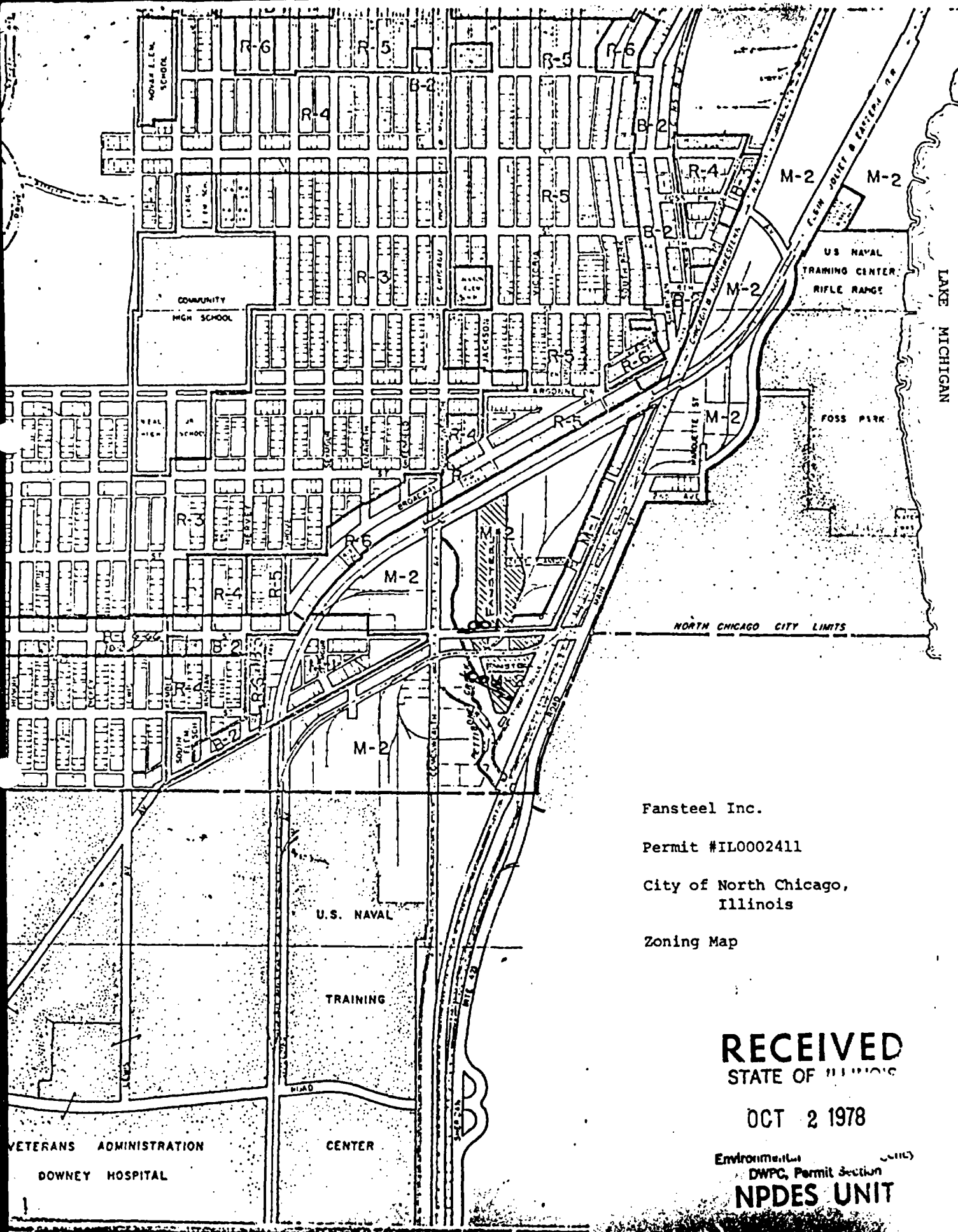
14. Does your discharge contain or is it possible for your discharge to contain one or more of the following substances added as a result of your operations, activities, or processes: ammonia, cyanide, aluminum, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, zinc, phenols, oil and grease, and chlorine (residual). A. ☐ yes B. ☒ no

I certify that I am familiar with the information contained in the application and that to the best of my knowledge and belief such information is true, complete, and accurate.

John M. Beyrer
Printed Name of Person Signing
9/28/78
Date Application Signed

Mgr., Facilities & Environmental Engr'g
Title
John M. Beyrer
Signature of Applicant

15 U.S.C. Section 1001 provides that:
Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious, or fraudulent statements or representations; or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years, or both.



Fansteel Inc.

Permit #IL0002411

City of North Chicago,
Illinois

Zoning Map

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Environmental
DWPC, Permit Section
NPDES UNIT

3.0

3.1 Two (2) discharges

3.2 Fansteel Inc.
North Chicago, Illinois 60064

3.3 Industrial

3.4 Continuous

3.5 42° 19' 18" N. Lat. - 87° 50' 38" W. Long.

3.6 001 - SW $\frac{1}{4}$ of NW $\frac{1}{4}$ Section 4
002 - NW $\frac{1}{4}$ of SW $\frac{1}{4}$ Section 4
Shields Township
Range 12
East of 3rd PM

3.7 Lake County

3.8 Pettibone Creek - 001 & 002

4.0 001 - at the outfall to Pettibone Creek

002 - in the effluent sampling manhole

ILLINOIS POLLUTION CONTROL BOARD
November 28, 1972

ENVIRONMENTAL PROTECTION AGENCY .

v.

PCB 72-76

FANSTEEL, INC. and the CITY OF NORTH CHICAGO

OPINION OF THE BOARD (by Mr. Dumelle)

This opinion is in support of an order entered by the Board on October 31, 1972 accepting a Stipulation and Proposal submitted by Fansteel, Inc. (Fansteel) and the Agency on June 14, 1972 as modified by a letter received October 31, 1972.

Complaint was entered by the Agency against Fansteel and the City of North Chicago on March 1, 1972 charging Fansteel with causing water pollution [Sect. 12(a) of the Environmental Protection Act]; violations of Rule 1.03(a), (c), and (d) of SWB-14; and violations of Rule 1.01 of SWB-5 (cyanide discharge) and charging North Chicago with allowing the discharge of the Fansteel contaminants thus causing water pollution. On June 14, 1972 a public hearing was held in North Chicago at which the Stipulation was presented for public comment. There was no adverse comment and in due time the Stipulation was presented to the Board.

Fansteel has two plants in North Chicago employing 700 persons manufacturing electrical contacts using precious metals among other materials. The South Plant is some 65 years old and includes processes of nickel plating, acid cleaning and tumbling and burnishing. The North Plant dates from 1942 and contains processes of metal cleaning, tungsten cutting, wire and tube drawing, tungsten powder reduction and generates effluents from the boiler house and laboratories.

Effluents from these two plants were discharged to Pettibone Creek containing settleable solids, cyanide, metals, acid and caustic wastes. Biological surveys performed in 1963 and 1970 have indicated detrimental effects from the Fansteel discharges to Pettibone Creek. The turbid wastes from the north plant and the toxic wastes from the south plant affect the north



STATE OF ILLINOIS
POLLUTION CONTROL BOARD

309 WEST WASHINGTON STREET SUITE 300

CHICAGO, ILLINOIS 60606

DAVID P. CURRIE, CHAIRMAN
DONALD A. HENSS
JACOB D. DUMELLE
JOHN L. PARKER
SAMUEL T. LAWTON, JR.

TELEPHONE
312-793-3620

November 29, 1972

Mayor Leo F. Kukla
City of North Chicago
City Hall
North Chicago, Illinois 60064

Mr. Howard R. Slater
120 South LaSalle Street
Chicago, Illinois 60603

Mr. Steven P. Davis
Greenberg, Keele et al
One North LaSalle Street
Chicago, Illinois 60602

Mr. Milton Kauffman
1321 Brassie Avenue
Flossmoor, Illinois

Ms. Nancy Schaffenacker
Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

PCB72-76

ENVIRONMENTAL PROTECTION AGENCY

v.

FANSTEEL, INC. and the CITY OF NORTH
CHICAGO

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DEC 3 1972

DIV. OF WATER POLLUTION CONTROL
ENVIRONMENTAL PROTECTION AGENCY

Dear Sirs:

Enclosed please find certified copies of the Opinion of the Board adopted November 28, 1972 for the above entitled matter.

Very truly yours,

Christan L. Moffett
Christan L. Moffett
Clerk of the Board

CLM:gn
enc.
cc:

H. Sheldon
L. Eaton
T. Immel
F. Crawford
J. Anderson
L. Hudson
B. Pye

RECYCLED PAPER

branch and main trunk of the stream to its mouth at the Great Lakes Naval Training Station Harbor. The reaches of the creek from the south plant outfall to and somewhat beyond Sheridan Road are best described as a biological desert. The creek does not fully recover before it terminates at the harbor. (EPA Statement of September 25, 1972, pp. 9-10).

The Stipulation provides and the Board has ordered that Fansteel will pretreat the South Plant effluent to permit discharge of all of its effluent to the North Shore Sanitary District as specified in Exhibit F of these proceedings within 22 weeks after an Agency permit is issued. Similarly, the Board has ordered that the North Plant pretreat its effluent in order that it may be discharged to NSSD to be done within 26 weeks after the Agency permit is issued.

In first discussing the Stipulation, the Board has two main concerns before approving it. The first concern dealt with the effects of the Fansteel effluent upon the North Chicago sewage treatment plant of the North Shore Sanitary District both as to possible upsets of the biological treatment and possible hydraulic overloading. On July 25, 1972 the Board entered an order requesting additional data from the Agency.

The Agency furnished on September 25, 1972 an extensive theoretical analysis showing that the biological treatment would not be harmed. It justified the additional hydraulic load on the plant in spite of the Board's prohibition of other new connections to it by the fact that this diversion of the Fansteel effluent out of Pettibone Creek would enable that body of water to recover and would eliminate the present health hazard of toxic wastes in the Creek.

The second concern of a majority of the Board had to do with the amount and nature of the stipulated penalty to be paid. The June 14, 1972 original stipulation provided that Fansteel would conduct certain research on the carbon adsorption treatment of cyanide at the South Plant even though not necessary to permit the effluent discharge to the North Shore Sanitary District's plant. Data on the research was deemed to be of value to the Agency (Para. C). If the expenditures for this research program did not exceed \$25,000 then the difference between the figures would be paid to the State of Illinois (Para. D). The majority of the Board felt that Agency research should not be financed through, in effect, a penalty due the State. And since it was anticipated that, in fact, the research expenditures would exceed \$25,000, therefore no specific penalty would accrue to the State even though damage to Pettibone Creek from water pollution had occurred.

1429000221

The modified Stipulation of October 31, 1972 provides that Fansteel will pay a penalty of \$20,000 to the State and will in addition perform the carbon adsorption cyanide research. The Board finds the modification entirely satisfactory and commends Fansteel for its offer to advance the waste treatment art by its research.

The City of North Chicago has filed a Motion for Summary Judgment which, in effect, would hold that it is absolved from any responsibility so far as abating pollution emanating from its sewers, as a consequence of the North Shore Sanitary District's alleged preemption of this responsibility. We find that a substantial issue of fact exists as to the role of the North Shore Sanitary District in this respect, which, itself, would preclude the entry of a summary judgment. Secondly, even if this was not so, we do not find North Chicago's contentions persuasive. The ordinance cited by North Chicago does not purport to relieve municipalities of their responsibility. The motion for summary judgment is denied. The mere co-extensive functions of a sanitary district in no way in itself relieves the city from its responsibilities so far as abating pollution from its sewers. See EPA v. City of Champaign, #71-51C, 2PCB 411, September 16, 1971; EPA v. City of Urbana, #71-365, PCB . . . , September 6, 1972. By this holding, we are not precluding the possibility of arrangements between cities and sanitary districts, whereby a sanitary district would assume all responsibility and obligation with respect to sewage generated within a particular municipality, when such arrangement causes the sanitary district to assume this responsibility. However, in the present case, adequate proof of such an arrangement has not been made. Nevertheless, because of the basic agreement arrived at between Fansteel and the EPA, we see no reason for the imposition of a penalty against the municipality and none will be imposed.

This opinion constitutes the findings of fact and conclusions of law of the Board.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion was adopted on the 28th day of November, 1972 by a vote of 3-0.

Christian L. Moffett
Christian L. Moffett, Clerk
Illinois Pollution Control Board

ILLINOIS POLLUTION CONTROL BOARD

October 31, 1972

ENVIRONMENTAL PROTECTION AGENCY

v.

PCB 72-76

FANSTEEL, INC., a corporation, and
CITY OF NORTH CHICAGO, a municipal
corporation

ORDER OF THE BOARD (by Mr. Dumelle)

The Stipulation and Proposal submitted by Fansteel, Inc. (Fansteel) and the Environmental Protection Agency (EPA) on June 14, 1972 as modified by a letter received October 31, 1972 from Fansteel to the Pollution Control Board is accepted and approved.

The conditions of the Order are as follows:

1. South Plant -- Fansteel will install equipment necessary to pre-treat the South Plant effluent as specified in Exhibit-F so as to permit discharge of all of said effluent to the North Shore Sanitary District sanitary sewer system. Said equipment will be installed and made operative within a period of twenty-two (22) weeks after the necessary Permit is issued. The system and timetable are more specifically described in said Exhibit F of these proceedings.
2. North Plant -- Fansteel will install equipment necessary to pre-treat the North Plant effluent so as to permit discharge of all of the effluent to the North Shore Sanitary District within a period of twenty-six (26) weeks after the necessary Permit is issued.
3. Carbon Absorption System -- Fansteel will:
 - A. Install at the South Plant a carbon absorption system.

system to treat cyanide containing effluent emanating therefrom, which equipment will be installed and made operative as part of the total effluent treatment system detailed in Exhibit "I".

B. As previously discussed, the parties have determined that such treatment for cyanide is not necessary to permit discharge of the South Plant effluent to the North Shore Sanitary District. However, it is recognized that the installation and operation of such equipment are of interest to the EPA in permitting the Agency to determine the effectiveness of such a system for treating complex cyanide-containing plating wastes. The Agency feels that such information will serve to more effectively review future applications which may involve similar type wastes. Fansteel agrees that it will continue the operation of the carbon absorption system after such time as the wastes are fully discharged into the North Shore Sanitary District and Fansteel further agrees that it will make available to the EPA in the normal course of reporting for a period of one year all of the data information and results derived from the operation of the system and will allow the EPA to observe and inspect the operation thereafter.

C. Until completion of the programs outlined in Paragraphs 1 and 2 above, Fansteel will cause its spent acids to be removed from the premises by a licensed scavenger and disposed of in accordance with all existing rules and regulations.

D. Fansteel will make any necessary piping and plumbing changes in the Plant so as to more expeditiously discharge any portion of its effluent to the North Shore Sanitary District on an accelerated schedule. It is to be recognized that this piping may or may not become part of the proposed long-range solutions to the problem and, therefore, are considered to be an additional expense over and above those previously mentioned.

The cost of installing and operating the solutions described in this paragraph 3 is estimated in Appendices I through IV of these proceedings.

4. Fansteel will pay to the Treasurer of the State of Illinois, pursuant to Title XII Section 42 of the Environmental Protection Act, the amount of \$20,000. Such payment shall be made by check to the Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Drive, Springfield, Illinois 62706.

142900027

5. Fansteel agrees to execute a Performance Bond in a form acceptable to the EPA and guarantee its execution of the terms and conditions of this Settlement Agreement; such Bond may be either Fansteel own Bond, supported and authorized by an appropriate Resolution of its Board of Directors (or Executive Committee), or a Surety Bond.

6. Fansteel shall apply for all necessary Permits from the EPA for the proposed modifications described herein.

7. Fansteel will provide monthly reports to the EPA by the 20th of each month, describing the compliance made during the preceding month.

IT IS SO ORDERED.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Order of the Board was adopted on the 21st day of October, 1972 by a vote of 5-0.

Christian L. Moffett
Christian L. Moffett, Clerk
Illinois Pollution Control Board

(1 4 2 9 0 0 0 0 2 1 8



DEPARTMENT OF THE ARMY
CHICAGO DISTRICT CORPS OF ENGINEERS
210 SOUTH DEARBORN STREET
CHICAGO, ILLINOIS 60606

10000-P

16 May 1972

U. S. Environmental Protection Agency
Office of Water Program, Region V
ATTN: Permit Section
1 North Wacker Drive
Chicago, Illinois 60606

ATTN: Linda Huff

Dear Sir:

The following documents relating to application for Federal permit
No. IL 070 0X3 2720467 are attached for your consideration and
appropriate action:

- ☒ EIS Form 4345- Page 2
- ☒ EIS Form 4345-1- Pgs 1 - 4 (001), 1,2,4 (002-003), Part B(001-003)
- ☒ State certification or description of impact on water quality.
- ☒ Drawings
- ☒ Public notice issued by this office.
- ☒ Outfall Locations, Implementation Schedule, Block Diagram.

It is requested that you advise this office by _____
whether proposed discharge or deposit may affect the quality of waters
of another State (as required by section 21(B)(2) of the Federal Water
Pollution Control Act, as amended).

Please provide by _____ the meaning, content,
and application of water quality standards applicable to the proposed
discharge or deposit and the impact which the proposed discharge or
deposit may, or is likely to, have on applicable water quality standards
and related water quality considerations.

Your cooperation in this matter is appreciated.

Sincerely yours,

MORTON E. SAXTON
Chief, Operations Division

7 Incls
as indicated above

IL 2720467

OUTFALL LOCATIONS

Fansteel Electrometals Division
North Chicago, Illinois 60064

Reference Point:

N.E. corner of N.W. 1/4 of S.W. 1/4 of Section 4 - T44N, Range 12
East of the Third Principle Meridian

Distance from Reference Point:

Outfall No. 1 - 656' W
Outfall No. 2 - 632' SSW
Outfall No. 3 - 134' W

14290000178

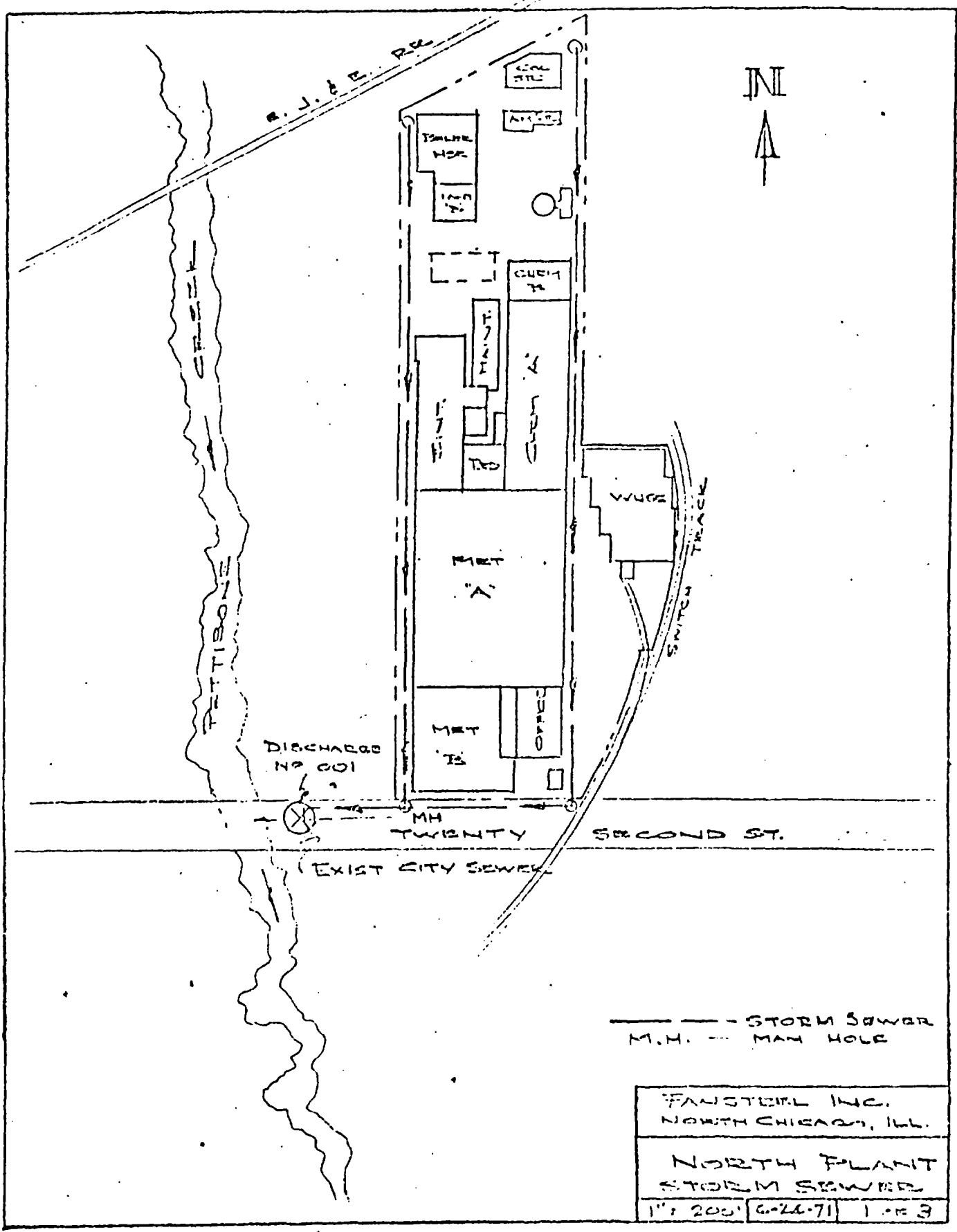
Applicant's Information Referred to as "Confidential"

In Section II, ENG Form May 71 4345-1 Items 14 and 16 refer to "Confidential Answers," which are not included in this transmittal. EPA is restricted from disseminating "Confidential Information" received under pledge of confidence. Your attention is invited to USC Title 18, paragraph 1905.

1429000Q179

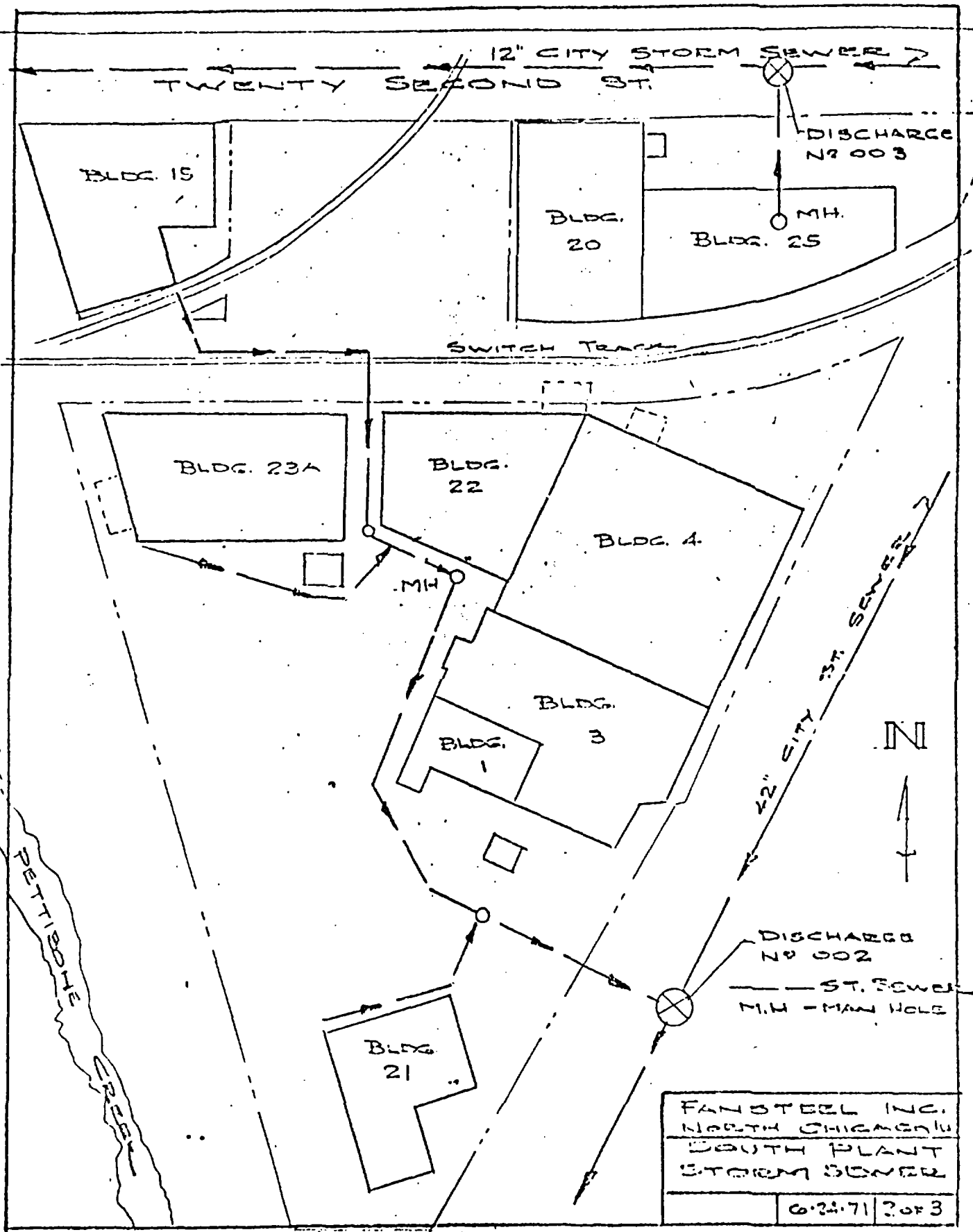
14290000180

2720167



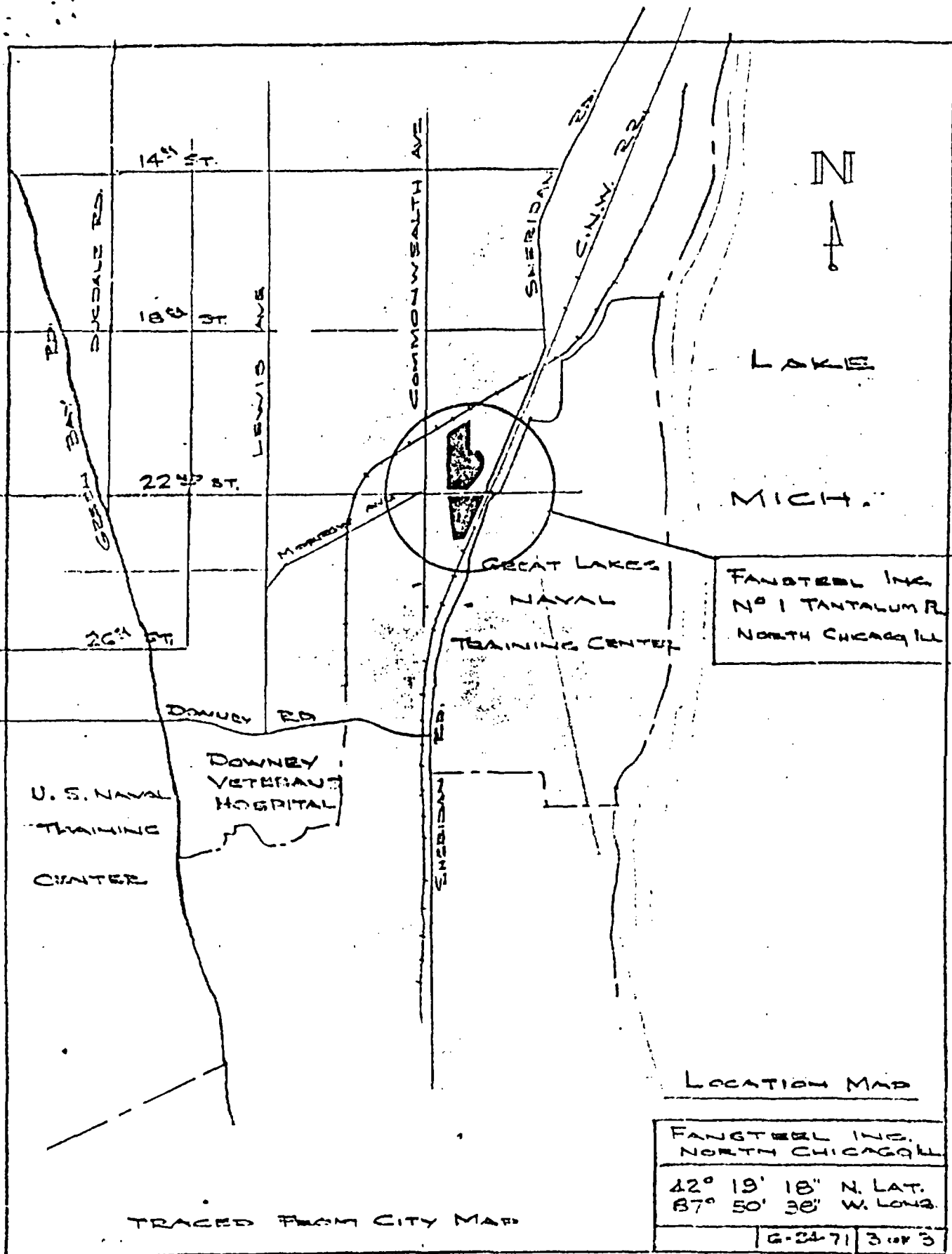
720467

14290000181



27701457

14290000182



TRACED FROM CITY MAP

FANGTEEL INC.
NORTH CHICAGO ILL

42° 19' 18" N. LAT.
87° 50' 38" W. LONG.

G-2471 3 of 3

16-1

16-1

rec'd 5-23-72

FORM APPROVED
GMA NO. 1 P 0408

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS

APPLICATION FOR PERMIT TO DISCHARGE OR WORK IN NAVIGABLE WATERS AND THEIR TRIBUTARIES

NPDES # IL 0002411

SECTION I. GENERAL INFORMATION

1. State	Application Number (to be assigned by Corps of Engineers)		
I L	012 011	2	12467
	Div.	Dist.	Type Sequence No.

2. Name of applicant and title of signing official
FANSTEEL INC.
Vice President, Administration and Finance

3. Mailing address of applicant
Fansteel Inc.
Number One Tantalum Place
North Chicago, Illinois 60064

4. Name, address, telephone number and title of applicant's authorized agent for permit application coordination and correspondence.
J. M. Boyer, Assistant to the General Manager
Fansteel Electrometals Division
Number One Tantalum Place
North Chicago, Illinois 60064
(312) 689-4900

NOTE TO APPLICANT: Refer to the pamphlet entitled "Permits for Work and Structures in and for Discharges or Deposits into Navigable Waters" before attempting to complete this form.

Required Information

- All information contained in this application will, upon request, be made available to the public for inspection and copying. A separate sheet entitled "Confidential Answers" must be used to set out information which is considered by the applicant to constitute trade secrets or commercial or financial information of a confidential nature. The information must clearly indicate the item number to which it applies. Confidential treatment can be considered only for that information for which a specific written request of confidentiality has been made on the attached sheet. However, in no event will identification of the contents and frequency of a discharge be recognized as confidential or privileged information.
- The applicant shall furnish such supplementary information as is required by the District Engineer in order to evaluate fully an application.
- If additional space is needed for a complete response to any item on this form, attach a sheet entitled "Additional Information." Indicate on that sheet the item numbers to which answers apply.
- Drawings required by items 20 and 21 should be attached to this application. Other papers which must be attached to this application include, if applicable, copies of a water quality certification or a written communication which describes water quality impact (see item 22 and item 10 of Section II below), the additional information sheet(s) in "c" above, and the confidential information sheet described in "a" above.

Fees

If any discharge or deposit is involved, an application fee of \$100 must be submitted with this application. An additional \$50 is required for each additional point of discharge or deposit.

Signature

- If a discharge is involved, an application submitted by a corporation must be signed by the principal executive officer of that corporation or by an official of the rank of corporate vice president or above who reports directly to such principal executive officer and who has been designated by the principal executive officer to make such applications on behalf of the corporation. In the case of a partnership or a sole proprietorship, the application must be signed by a general partner or the proprietor. Other signature requirements are discussed in the pamphlet.
- If no discharge is involved, an application may be signed by the applicant or his authorized agent.

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate.

Signature of Applicant

18 U.S.C. Section 1021 provides that:

Whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

FOR CORPS OF ENGINEERS USE ONLY

Acronym name of applicant

Are discharge structures

Major? ☐ Minor? ☐ N/A? ☐

Date received, form not complete

Date sent to EPA, form not complete

Date received, form complete but without certificate

Date sent to EPA, NOAA, D/I, AEC,

Date received, form complete

FPC in complete form

Date of Cert./Ltr.

day

mo

yr

day

mo

yr

Date

JUN 30 71
mo day yr

(Office use only)

2720467

Check type of application:

a. Original



b. Revision



7. Number of original application

8. Name of facility where discharge or construction will occur.

Fansteel North Chicago Plant

9. Full mailing address of facility named in item 8 above.

Fansteel Electrometals Division

Number One Tantalum Place

North Chicago, Illinois 60064

10. Names and mailing addresses of all adjoining property owners whose property also adjoins the waterway.

11. Check to indicate the nature of the proposed activity:

a. Dredging



b. Construction



c. Construction with Discharge



d. Discharge only



12. If activity is temporary in nature, estimate its duration in months.

If application is for a discharge:

13. List intake sources

Source	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal or private water supply system	3.6
Surface water body	
Ground water	
Other	

14. Describe water usage within the plant

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Cooling water	0.3
Boiler Feed water	0.1
Process water	2.7
Sanitary system*	0.8
Other	

15. List volume of discharges or losses other than into navigable waters.

Type	Estimated Volume in Million Gallons Per day or Fraction Thereof
Municipal waste treatment system	0.8
Surface confinement	
Underground disposal	
Waste Acceptance firms *	
Evaporation	
Consumption	

* Indicate number employees served per day

700

If structures exist, or dredging, filling or other construction will occur, the precise location of the activity must be described.

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2720467

- a. Name the corporate boundaries within which the structures exist or the activity will occur.

16. State Illinois

17. County Lake

18. City or Town North Chicago

- b. Name of waterway at the location of the activity

19. Municipal Storm Sewers Which Outfall into Pettibone Creek

20. Maps and sketches which show the location and character of each structure or activity, including any and all outfall devices, dispersive devices, and non-structural points of discharge, must be attached to this application.

21. For construction or work in navigable waters for which a separate permit is sought under 33 U.S.C. 403, the character of each structure must be fully shown on detailed plans to be submitted with this application. Note on the drawings those structures for which separate discharge information (Section II of this form) has been submitted.

22. List all approvals or denials granted by Federal, interstate, State or local agencies for any structures, construction, discharges or deposits described in this application.

Type of document

Id. No.

Date

Issuing Agency

Certification applied for to Illinois Protection Agency June 30, 1971.

(Note: Preliminary plan for water pollution control filed with Illinois EPA, February 26, 1971)

23. Check if facility existed or was lawfully under construction prior to April 3, 1970. ☒

24. If dredging or filling will occur:

State the type of materials involved, their volume in cubic yards, and the proposed method of measurement.

25. Describe the proposed method of instrumentation which will be used to measure the volume of any solids which may be deposited and to determine its effect upon the waterway.

Periodic sampling and analysis by Standard Methods.

26. State rates and periods of deposition described in Item 25.

See Section II, Table A.

Fansteel Inc.
North Chicago, Illinois

IL-2720467

IMPLEMENTATION SCHEDULE

In the past several months, progress made toward effluent control has included:

1. An expanded monitoring program with more frequent sampling and more comprehensive and sophisticated analysis using atomic absorption.
2. Rearrangement and modernization of the processing operations contributing to Discharge S/N 002.
3. Definition of a treatment system for Discharge S/N 002 process operations.
4. Substantial progress toward identifying and solving problems associated with Discharge S/N 001.

A revised implementation plan has recently been submitted to Illinois Environmental Protection Agency. It proposes:

1. Installing an alkaline continuous precipitation system for the plating and cleaning operations now contributing to Discharge #002. It is planned that Discharge #003 will be discontinued, and treated with this system also.

Effluent will be treated to the sanitary sewer standards of Illinois Technical Release 20-22 and discharged to the sanitary sewer system. Dewatered sludge will be scavenged. We expect the system to be operational 29 weeks after plan approval.

2. Continuing the program of identifying and quantifying problems associated with Discharge #001. An implementation plan will be submitted to the EPA in approximately 10 weeks. Our goal here also will be to divert process water, pretreated as required, to the sanitary sewer.

14290006140

SECTION II. PLANT PROCESS AND DISCHARGE DESCRIPTION

1. Discharge described below is

a. Present

b. Proposed new
or changed2. Implementation
schedule

(Office use only)

2720457

Name of corporate boundaries within which the point of discharge is located.

State

County

City or
Town

6. Discharge Serial No.

001

3. Illinois4. Lake5. North Chicago

State the precise location of the point of discharge.

7. Latitude 4 2 Degrees: 1 9 Min: 1 8 Sec. N8. Longitude 8 7 Degrees: 5 0 Min: 3 8 Sec. W

9. Name of waterway at the point of discharge.

Municipal Storm Sewer

10. Has application for water quality certification or description of impact been made? If so, give date:

Date

JUN 30 71
mo day yrCheck if certificate
is attached to form

Name Issuing Agency

Illinois Environmental Protec-
tion Agency

11. Narrative description of activity (include terms of general 4-digit Standard Industrial Classification, and specific manufacturing process).

1. Manufacture of electrical contacts from refractory metals. Processes
include powder reduction, powder pressing, sintering, swaging, cutoff,
and piercing.2. Manufacture of nonferrous wire, foil and tubing. Processes include
drawing, rolling, cleaning, plating.

12. Standard industrial classification number.

1. 36992. 3356

13. Principal product.

1. Electrical Contacts2. Wire, Foil and Tubing14. Amount of principal product produced
per day.

15. Principal raw material.

1. Oxides of Tungsten2. Tantalum16. Amount of principal raw material
consumed per day.1. Information provided
& on "Confidential
2. Answers" Sheet

17. Number of batch discharges per day.

18. Average gallons per batch discharge.

19. Date discharge began.

AUG 56
mo day yr

20. Date discharge will begin.

mo day yr

21. Describe waste abatement practices.

1. Recirculating cooling water system for cutoff operations.2. Separate system for collection and automatic neutralization of
cleaning solutions. Batch disposal of plating solutions.Process water discharge - 75,000 gal./day

22.

PHYSICAL DESCRIPTION OF INTAKE WATER AND DISCHARGE

(Office use only)

Intake

Discharge

2720467

Discharge Serial No.

001

Parameter and Code	UNTREATED INTAKE WATER (1)	TREATED INTAKE WATER (2)	AVERAGE (DAILY) (3)	MINIMUM (OPERATING YEAR) (4)	MAXIMUM (OPERATING YEAR) (5)	SAMPLE FREQUENCY (6)	CONTINUOUS MONITORING (7)
Flow (Gallons per day) 00056	260,000		200,000	130,000	300,000	MOPLY	
pH 00400	7.5		8.1	6.5	10.0	WKLY	
Temperature (Winter) (°F) 74028	36.20		50	40	60	(Est.)	
Temperature (Summer) (°F) 74027	52.95		70	60	80	(Est.)	

23.

DISCHARGE CONTENTS

PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT	PARAMETER	PRESENT	ABSENT
Color 00080		X	Aluminum 01105		X	Nickel 01067		X
Turbidity 00070	X		Antimony 01097		X	Selenium 01147		X
Radioactivity 74050		X	Arsenic 01002		X	Silver 01077		X
Hardness 7900		X	Beryllium 01012		X	Potassium 00937		X
solids 00300	X		Barium 01007		X	Sodium 00329		X
Ammonia 00610	X		Boron 01022		X	Titanium 01152		X
Organic Nitrogen 00605		X	Cadmium 01017		X	Tin 01102		X
Nitrate 00320	X		Calcium 00016	X		Zinc 01092		X
Nitrite 00615		X	Cobalt 01037		X	Alcides 74051		X
Phosphorus 00555		X	Chromium 01034		X	Oil and Grease 00550		X
Sulfate 00545	X		Copper 01042	X		Phenols 32730		X
Sulfide 00745		X	Iron 01045	X		Surfactants 30260		X
Sulfite 00740		X	Lead 01051		X	Chlorinated Hydrocarbons 74052		X
Bromide 71870		X	Magnesium 00027		X	Pesticides 74053		X
Chloride 00940	X		Manganese 01055		X	Fecal Streptococci Bacteria 74054		X
Cyanide 00720	X		Mercury 71000		X	Coliform bacteria 74055		X
Fluoride 00951	X		Molybdenum 01052		X			

Has all known hazardous or potentially hazardous substances in your plant been inventoried?



Yes



No

2720457

24b. If yes, have steps been taken to insure that there exists no possibility of any such known hazardous or potentially hazardous substance entering this discharge?



Yes



No

25. Remarks.

The information above completes the basic reporting requirements which are required of all applicants. Those applicants whose discharge results from an activity included within any of the Standard Industrial Classification Code (SIC Code) categories listed below must complete Part A of this form as well.

CRITICAL INDUSTRIAL GROUPS

SIC 098	FISH HATCHERIES, FARMS, AND PRESERVES	SIC 285	PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS
SIC 10-14	DIVISION B - MINING	SIC 2871	FERTILIZERS
SIC 201	MEAT PRODUCTS	SIC 2879	AGRICULTURAL PESTICIDES, AND OTHER AGRICULTURAL CHEMICALS, NOT ELSEWHERE CLASSIFIED
SIC 202	DAIRY PRODUCTS	SIC 2891	ADHESIVES AND GELATIN
SIC 203	CANNED PRESERVED FRUITS, VEGETABLES (EXCEPT SEAFOODS, SIC 2031 AND 2036)	SIC 2892	EXPLOSIVES
SIC 2031, 2036	CANNED AND CURED FISH AND SEAFOODS; FRESH OR FROZEN PACKAGED FISH AND SEAFOODS	SIC 29	PETROLEUM REFINING AND RELATED INDUSTRIES
SIC 204	GRAIN MILL PRODUCTS	SIC 3011, 3069	TIRES AND INNER TUBES; FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED
SIC 206	SUGAR	SIC 3079	MISCELLANEOUS PLASTICS PRODUCTS
SIC 207	CONFECTIONARY AND RELATED PRODUCTS	SIC 311	LEATHER TANNING AND FINISHING
SIC 203	BEVERAGES	SIC 32	STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
SIC 209	MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS	SIC 331	BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS
SIC 27	TEXTILE MILL PRODUCTS	SIC 332	IRON AND STEEL FOUNDRIES
SIC 23	APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS	SIC 333, 334	PRIMARY SMELTING AND REFINING OF NON-FERROUS METALS; SECONDARY SMELTING AND REFINING OF NON-FERROUS METALS
SIC 242	SAWMILLS AND PLANING MILLS	SIC 336	NONFERROUS FOUNDRIES
SIC 2432	VENEER AND PLYWOOD	SIC 347	COATING, ENGRAVING, AND ALLIED SERVICES
SIC 2491	WOOD PRESERVING	SIC 35	MACHINERY, EXCEPT ELECTRICAL
SIC 26	PAPER AND ALLIED PRODUCTS	SIC 36	ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES
SIC 281	INDUSTRIAL INORGANIC AND ORGANIC CHEMICALS (EXCEPT SIC 2818)	SIC 37	TRANSPORTATION EQUIPMENT (EXCEPT SHIP BUILDING AND REPAIRING, SIC 3731)
SIC 2818	INDUSTRIAL ORGANIC CHEMICALS	SIC 3731	SHIP BUILDING AND REPAIRING
SIC 282	PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS	SIC 491	ELECTRIC COMPANIES AND SYSTEMS
SIC 283	DRUGS	SIC 493	COMBINATION COMPANIES AND SYSTEMS
SIC 284	SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS		

PART A

Revised 8/3/72

(Note: Submission of Part A is required of all applicants whose processes are listed on page 3 above.)

(Office use only)

2727-11-7

Discharge Serial No.

001

INFORMATION REQUIRED OF SPECIFIED INDUSTRIES

Intake		Discharge									
PARAMETER AND CODE	DAILY AVG. CONCENTRATION (1)	TREATED INTAKE WATER MAXIMUM CONCENTRATION (2)	MAXIMUM CONCENTRATION PER PROCESS UNIT (3)	DAILY AVG. CONCENTRATION PER DAY (4)	AVERAGE POUNDS PER DAY (5)	AVERAGE POUNDS PER DAY (6)	SAMPLE TYPE (7)	SAMPLE FREQUENCY (8)	METHOD OF ANALYSIS (9)	CONTINUOUS MONITORING (10)	(11)
ALKALINITY (as CaCO ₃) 00410	9.8		195 (e)		330	130.52	220.56	AVER	Single	Standard Methods	ABS
O.D. 5-DAY 00310	2		15 (e)		25	10.0	16.9	AVER	Single	"	ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	119		336 (e)		568	224.2	379.0	AVER	Single	"	ABS
TOTAL SOLIDS 00500	165		858	1,450 →		463	762	AVER	WKLY	"	REC
TOTAL DISSOLVED SOLIDS 70300	162		689	1,164 →		401	735	AVER	WKLY	"	REC
TOTAL SUSPENDED SOLIDS 00530	3		431	728 →		62	105	AVER	WKLY	"	REC
TOTAL VOLATILE SOLIDS 00505	31		120 (e)		20	79.0	13.35	AVER	Single	"	ABS
AMMONIA (as N) 00610	.10		0.10 (e)		<0.2	0.10	26.14	AVER	Single	"	ABS
KJELDAHL NITROGEN 00625	<.14		10 (e)		17	7.47	13	AVER	Single	"	ABS
NITRATE (as N) 00620	.15		8 (e)		13.5	5.3	8.96	AVER	Single	"	ABS
PHOSPHORUS TOTAL (as P) 00665	-0-		0.51 (e)		0.36	0.34	0.57	AVER	Single	"	ABS

PART A

(State Submission of Part A is required of all applicants whose processes are listed on page 3 above.)

(Office use only)

2720467

Discharge Serial No.

001

INFORMATION REQUIRED OF SPECIFIED INDUSTRIES

Intake		Discharge									
PARAMETER AND CODE	DAILY AVG. CONCENTRATION (1)	MAXIMUM CONCENTRATION (2)	MAXIMUM POUNDS PER PROCESS UNIT (3)	DAILY AVG. CONCENTRATION PER DAY (4)	AVERAGE POUNDS PER DAY (5)	SAMPLE TYPE (6)	SAMPLE FREQUENCY (7)	METHOD OF ANALYSIS (8)	CONTINUOUS MONITORING (9)	(10)	(11)
ALKALINITY (as Ca CO ₃) 00410	9.8		195 (e)		330	130.52	220.56	AVER	Single	Standard Methods	ABS
B.O.D. 5-DAY 00310	2		15 (e)		25	10.0	16.9	AVER	Single	"	ABS
CHEMICAL OXYGEN DEMAND (C.O.D.) 00340	119		336 (e)		568	224.2	379.0	AVER	Single	"	ABS
TOTAL SOLIDS 00500	165		858	1,450	463	782	AVER	WKLY	"	REC	
TOTAL DISSOLVED SOLIDS 70300	162		689	1,164	401	735	AVER	WKLY	"	REC	
TOTAL SUSPENDED SOLIDS 00530	3		431	728	62	105	AVER	WKLY	"	REC	
TOTAL VOLATILE SOLIDS 00505	31		120 (e)		20	79.0	13.35	AVER	Single	"	ABS
AMMONIA (as N) 00610	.10		23 (e)		39	15.50	26.14	AVER	Single	"	ABS
KJELDAHL NITROGEN 00625	<.14		16 (e)		27	10.64	17.98	AVER	Single	"	ABS
NITRATE (as N) 00620	.15		8 (e)		13.5	5.3	8.96	AVER	Single	"	ABS
PHOSPHORUS TOTAL (as P) 00665	-0-		0.51 (e)		0.86	0.34	0.57	AVER	Single	"	ABS

PART B DISCHARGE DESCRIPTION

(Note: Submission of Part B is required of all applicants who are also required to submit Part A. Only those parameters specifically indicated in the instructions are to be reported by a particular industry)

(Office use only)

Fansteel Inc.
Electrometals Div. - North Chicago
Application # EL1770167

Discharge Serial No.
001

B-1. PHYSICAL AND BIOLOGICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-1)

Intake	Discharge						
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	AVERAGE (DAILY)	MINIMUM (OPERATING YEAR)	MAXIMUM (OPERATING YEAR)	SAMPLE FREQUENCY	CONTINUOUS MONITORING
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)
COLOR 00080 (PtCO Units)			15			0	A
SPECIFIC CONDUCTANCE 00095 (micro mhos @ 25°C)	250		325		480 (e)	0	A
TURBIDITY 00070 (Jackson Units)			90			0	A
FECAL STREPTOCOCCI BACTERIA 74054							
FECAL COLIFORM BACTERIA 74055							
TOTAL COLIFORM BACTERIA 0056							

Col (6) Sample Frequency: 0 indicates single sample.

Fansteel Inc.
Electrometals Div. - North Chicago
Application #IL2720467

(Office use only)

Discharge Serial No.
001

B-2. CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge										
		UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY PER PROCESS UNIT	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING		
PARAMETER AND CODE		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ACIDITY (as CaCO ₃) 00435 (mg. CaCO ₃ /liter)		4		18 (e)		30	12	20	A	O	S	A
TOTAL ORGANIC CARBON (T.O.C.) 00580												
TOTAL HARDNESS 00600												
NITRITE (as N) 00615												
ORGANIC NITROGEN 00605												
PHOSPHORUS-ORTHO (as P) 70507 mg/l		<.01		0.45 (e)		0.79	.31	.53	A	O	S	A
SULFATE 00345 mg/l		32		.22		.37	.15	.25	A	O	S	A
SULFIDE 00745 mg/l		<1.0		<1.0		<1.7	<1.0	<1.7	A	O	S	A
SULFITE 00740												
BROMIDE 71300 mg/l		<1.0		<1.0		<1.7	<1.0	<1.7	A	O	S	A

Fansteel Inc.
Electrometals Div. - North Chicago
Application #IL2720467

(Office use only)

Discharge Serial No.

001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

PARAMETER COND CODE	Discharge										
	UNTREATED INTAKE WATER	TREATED INTAKE WATER	MAXIMUM CONCENTRATION	MAXIMUM POUNDS PER DAY	MAXIMUM POUNDS PER DAY	DAILY AVG. CONCENTRATION	AVERAGE POUNDS PER DAY	SAMPLE TYPE	METHOD OF ANALYSIS	CONTINUOUS MONITORING	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
4 CHLORIDE mg/l 00940	2.8		12.9 (e)		.22	8.6	14.6	A	O	S	A
5 CYANIDE mg/l 00720	<.02		.06 (e)		<.09	<.02	<.03	A	W	S	A
9 FLUORIDE mg/l 00951	1		<1 (e)		<1.7	<1	<1.7	A	O	S	A
2 ALUMINUM-TOTAL 0105 ug/l	150		375 (e)		.640	250	.425	A	O	S	A
1 ANTIMONY-TOTAL 01097											
ARSENIC-TOTAL 01022											
BARIUM-TOTAL 01007											
BERYLLIUM-TOTAL 01012											
BORON-TOTAL 01022											
CADMIUM-TOTAL 01027 ug/l	<50		100 (e)		<.17	<50	<.085	A	O	S	A

Fansteel Inc.
Electrometals Div. - North Chicago
Application #IL2720467

(Office use only)

Discharge Serial No.
001

B-2. (cont.) CHEMICAL PARAMETERS OF INTAKE WATER AND DISCHARGE (See Table B-2)

Intake		Discharge									
PARAMETER AND CODE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
UNTREATED INTAKE WATER											
TREATED INTAKE WATER											
MAXIMUM CONCENTRATION											
MAXIMUM POUNDS PER DAY PER PROCESS UNIT											
MAXIMUM POUNDS PER DAY											
DAILY AVG. CONCENTRATION											
AVERAGE POUNDS PER DAY											
SAMPLE TYPE											
SAMPLE FREQUENCY											
METHOD OF ANALYSIS											
CONTINUOUS MONITORING											
CALCIUM-TOTAL 00916 mg/l	92.5		48 (e)	.081		32.1	.054	A	O	S	A
CHROMIUM-TOTAL 01034 ug/l	N.D.		120 (e)	.20		80	.134	A	W	S	A
COBALT-TOTAL 01037											
COPPER-TOTAL 01042 ug/l	< 40		510 (e)	.860		340	.574	A	W	S	A
IRON-TOTAL 01045 ug/l	60		180 (e)	.310		120	.206	A	O	S	A
LEAD-TOTAL 01051 ug/l	< 100		195 (e)	.328		130	.219	A	O	S	A
MAGNESIUM-TOTAL 00927 mg/l	13.45		21 (e)	36.7		14.4	24.5	A	O	S	A
MANGANESE-TOTAL 01055 ug/l	30		100 (e)	.133		60	.100	A	W	S	A
MERCURY-TOTAL 01900 ug/l	< 0.5		< 1 (e)	< .001		< .1	< .001	A	O	S	A
MOLYBDENUM-TOTAL 01062											



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION V
1 NORTH WACKER DRIVE
CHICAGO, ILLINOIS 60606

RECEIVED

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB 22 1974

Mr. John H. Devlin
Vice President, Administration and Finance
Fansteel Inc.
Number One Tantalum Place
North Chicago, Illinois 60064

NPDES
#50-72

Re: NPDES Permit
No. IL 0002411

Dear Mr. Devlin:

Your application IL 070 OX3 2 720467 for a National Pollutant Discharge Elimination system (NPDES) Permit has been processed in accordance with Sections 402 and 405 of the Federal Water Pollution Control Act Amendments of 1972, (86 Stat. 816; Public Law 92-500, 33 U.S.C. 1251 et seq.).

The enclosed NPDES Permit covers your operations which discharge into the Pettibone Creek at North Chicago, Illinois. All discharges authorized from this facility shall be consistent with the terms and conditions of this Permit.

Very truly yours,

ORIGINAL SIGNED BY JAMES O. McDONALD

James O. McDonald
Director, Enforcement Division

Enclosures
Permit
Reporting Forms

cc: Dr. Richard Briceland, Director
Illinois Environmental Protection Agency, w/Permit

FINAL PERMIT AS ISSUED

Permit No. IL 0002411

Application No. IL 070 OX3 2 720467

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq ; the "Act"),

FANSTEEL, INC. (NORTH CHICAGO PLANT)

is authorized to discharge from a facility located at

Number One Tanalum Place
North Chicago, Illinois 60064

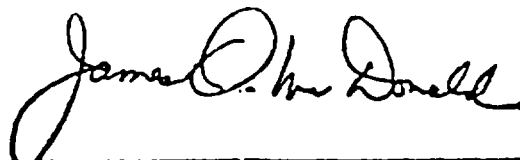
to receiving waters named Pettibone Creek via the municipal storm sewer system

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on the date of issuing authority's signature.

This permit and the authorization to discharge shall expire at midnight, September 1, 1978. Permittee shall not discharge after the above date of expiration. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the Agency authorized to issue NPDES permits no later than 180 days prior to the above date of expiration.

Signed this FEB 22 1974



Director, Enforcement Division

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FINAL PERMIT AS ISSUED

Page 2 of 13

Permit No. IL 0002411

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (INITIAL)

- During the period beginning on the effective date of this permit and lasting until April 30, 1974, the permittee is authorized to discharge from outfall(s) serial number(s) 001, 002 & 003

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day	(lbs/day)	Other Units	(Specify)	Measurement Frequency	Sample Type
<u>Outfall 001</u>	<u>Daily Avg</u>	<u>Daily Max</u>	<u>Daily Avg</u>	<u>Daily Max</u>		
Flow M ³ /Day (MGD)	-	-	-	-	Measure during monitoring	
Suspended Solids	-	-	40 mg/l	62 mg/l	Monthly	24 hour composite
Lead	-	-	1.0 mg/l	2.0 mg/l	Monthly	24 hour composite
Nickel	-	-	-	2.0 mg/l	Monthly	24 hour composite
Zinc	-	-	1.0 mg/l	2.0 mg/l	Monthly	24 hour composite
<u>Outfall 002</u>						
Flow M ³ /Day (MGD)	-	-	-	-	Measure during monitoring	
Suspended Solids	-	-	-	-	Monthly	24 hour composite
Oil & Grease	-	-	-	-	Monthly	Grab

For the purpose of this permit, discharge 002 is limited solely to non-contact cooling water free from process and other waste discharges. In the event that the permittee shall require the use of water treatment additives, this permit must be modified in accordance with Part II.

Outfall 003

Outfall 003 is limited to storm water only. No process or non-contact cooling water discharge shall be permitted. No monitoring is required.

The pH shall not be less than 6.0 nor greater than 9.0 and shall be monitored monthly, grab samples.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at a point representative of the discharge but prior to entry into the Municipal storm sewer system.

FINAL PERMIT AS ISSUED

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Permit No. IL 0002411

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (FINAL)

2. During the period beginning May 1, 1974 and lasting until the expiration date, the permittee is authorized to discharge from outfall(s) serial number(s) 001, 002 & 003

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS				MONITORING REQUIREMENTS	
	kg/day	(lbs/day)	Other Units	(Specify)	Measurement Frequency	Sample Type
Outfalls 001 & 002	Daily Avg	Daily Max	Daily Avg	Daily Max		
Flow M ³ /Day (MGD)	-	-	-	-	Measure during monitoring	
Suspended Solids	-	-	-	-	Monthly	24 hour composite
Oil & Grease	-	-	-	-	Monthly	Grab

For the purpose of this permit, these discharges are limited solely to non-contact cooling water free from process and other waste discharges. In the event that the permittee shall require the use of water treatment additives, this permit must be modified in accordance with Part II.

Outfall 003

Outfall 003 is limited to storm water only. No process or non-contact cooling water discharge shall be permitted. No monitoring is required.

Intake water shall be monitored for suspended solids and oil & grease for comparison with the discharge. Monitoring frequency is monthly - grab sample.

The pH shall not be less than 6.0 nor greater than 9.0 and shall be monitored monthly, grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at a point representative of the discharge but prior to entry into the Municipal storm sewer system.

FINAL PERMIT AS ISSUED

PART I

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Permit No. IL 0002411

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

Monitoring results obtained during the previous three months shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on April 28, 1974. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the State at the following addresses:

U. S. Environmental Protection Agency
Region V, Enforcement Division
ATTN: Chief, Compliance Section
1 North Wacker Drive
Chicago, Illinois 60606

Environmental Protection Agency
State of Illinois
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

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FINAL PERMIT AS ISSUED

PART I

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Permit No. IL 0002411

3. Definitions

a. "Daily Average" Discharge

1. Weight Basis - The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
2. Concentration Basis - The "daily average" concentration means the arithmetic average (weighted by flow value) of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow value) of all the samples collected during the calendar day.

b. "Daily Maximum" Discharge

1. Weight Basis - the "daily maximum" discharge means the total discharge by weight during any calendar day.
2. Concentration Basis - the "daily maximum" concentration means the daily determination of concentration for any calendar day.

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FINAL PERMIT AS ISSUED

PART I

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Permit No. IL 0002411

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Act, under which such procedures may be required.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used; and
- e. The results of all required analyses.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA No. 3320-1). Such increased frequency shall also be indicated.

7. Records Retention

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator or the State water pollution control agency.

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C. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

- (1) Commencement of construction - Already started
(2) Report of progress - April 1, 1974
(3) Attain operational level by - April 30, 1974

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of non-compliance, any remedial actions taken, and the probability of meeting the next scheduled requirements.

FINAL PERMIT AS ISSUED

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Permit No. IL 0002411

PART II

A. MANAGEMENT REQUIREMENTS

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Regional Administrator and the State with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.

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FINAL PERMIT AS ISSUED

PART II

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Permit No. IL 0002411

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Regional Administrator and the State in writing of each such diversion or bypass.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed from or resulting from treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if no date for implementation appears in Part I,

- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of one or more of the primary sources of power to the wastewater control facilities.

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FINAL PERMIT AS ISSUED

PART II

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Permit No. IL 0002411

B. RESPONSIBILITIES

1. Right of Entry

The permittee shall allow the head of the State water pollution control agency, the Regional Administrator, and/or their authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. Transfer of Ownership or Control

In the event of any changes in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the State water pollution control agency.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

FINAL PERMIT AS ISSUED

PART II

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Permit No. IL 0002411

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

5. Toxic Pollutants

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

6. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Part II, A-5) and "Power Failures" (Part II, A-7), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Act.

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FINAL PERMIT AS ISSUED

PART II

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Permit No. IL 0002411

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

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FINAL PERMIT AS ISSUED

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Permit No. IL 0002411

PART III

OTHER REQUIREMENTS

Additional Reporting of Monitoring to Illinois Environmental Protection Agency

Monitoring results obtained during the previous one month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 15th day of the month following the completed reporting period. The first monthly report is due on April 15, 1974. The signed reports required herein, shall be submitted monthly to the State at the following address:

Environmental Protection Agency
State of Illinois
2200 Churchill Road
Springfield, Illinois 62706

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